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THE NORTH AMERICAN FREE TRADE AGREEMENT

AN ECONOMIC ASSESSMENT
FROM A CANADIAN PERSPECTIVE

November 1992

Canada

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Department of Finance
Canada

Ministère des Finances
Canada

THE NORTH AMERICAN FREE TRADE AGREEMENT

ECONOMIC ASSESSMENT
FROM A CANADIAN PERSPECTIVE

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CHAPTER 1: ADVANCING CANADA'S TRADE STRATEGY

Canadian entry into the new North American Free Trade Area will take it another step along the road of trade liberalization that has brought Canada increasing prosperity over the past half century.

International trade is Canada's bread and butter. Securing and enhancing access to external markets is thus a prime objective on the Government's agenda to strengthen the Canadian economy. Exports are one of the main engines of growth and job creation in our economy: they have been growing much faster than other components of production. Today, one in every three Canadian jobs depends on exports. On the other side of the trade equation, imports include both essential inputs for the production of Canadian goods and services and a vast array of final goods and services sought by Canadian consumers.

The benefits of trade liberalization are unmistakable. The Organization for Economic Co-operation and Development (OECD) has identified trade liberalization as the most significant reason for economic growth of western economies in the postwar period. In an influential report, the Paris-based organization of advanced industrial countries stated that:

The liberalization of world trade on a multilateral basis was one of the outstanding successes of international economic co-operation in the first 20 years of the postwar period. The process of liberalization has still a long way to go, indeed it has in some significant respects been reversed in more recent years; but the experience of the past few decades makes it clear that greatly widened opportunities for trade, once durably established, have substantial positive effects on economic performance.¹

Only international arrangements with clear trading rules can assure durable opportunities for trade. They provide stable access to markets and consistent interpretation of international rules: these two elements serve all trading countries, but they are particularly beneficial to countries such as Canada – relatively small economies relying importantly on foreign trade for their well-being. Without such rules, a country's exports may be subjected to abrupt variations depending on the prevailing attitude of its trading partners, which may be more influenced by politics than economics. These rules become all the more important as the nature of protectionism changes from the obvious protectionism of tariffs to the more hidden protectionism of non-tariff barriers, such as government procurement, technical barriers to trade, quotas, "voluntary" restraint agreements, subsidies, and countervailing measures. Trade in services, as well as trade-related aspects of intellectual property and investment laws, are also becoming front-line issues in trade negotiations.

The Government of Canada is following a two-track strategy in pursuing the benefits of trade liberalization. Canada has vigorously promoted multilateral trade negotiations (MTN) to make the world trading system more liberal, and has pressed forward in an effective and key role toward freer trade in North America.

¹ OECD, *Structural Adjustment and Economic Performance*, Paris, 1988.

Canada was an architect of the strong multilateral trading system embodied in the 1947 General Agreements on Tariffs and Trade (GATT). Today, we are participating in the Uruguay Round of the MTN and continue to view it as an essential element of global trade liberalization. A successful Uruguay Round will mean a fairer set of trade rules that will bring new export opportunities to Canadian producers and lower prices to Canadian consumers.

Canada's regional trade initiatives are parallel to the multilateral negotiations and consistent with GATT objectives. They aim to achieve a more immediate expansion of the regional and historical markets that are so crucial to Canada's economic welfare. The 1965 Auto Pact allowed the Canadian automobile industry to rationalize its operations and to specialize in its most efficient product lines. By exploiting these economies of scale, the auto sector increased productivity, production, employment, and real wages and reduced the prices paid by consumers. The 1989 Canada-United States Free Trade Agreement (FTA) consolidated Canada's relationship with its largest trading partner and ensured enhanced access for a wider range of Canadian products to this market, which buys about 75 per cent of our exports. The FTA lowered barriers between Canada and the United States to liberalize trade and established a mechanism for settling disputes to put this trade on a more secure footing.

On August 12, 1992, Canada, the United States and Mexico agreed in principle on the elements of a North American Free Trade Agreement (NAFTA). It is another step forward. For Canada, the NAFTA basically extends the Canada-U.S. FTA to incorporate the fast-growing Mexican market. In the process, the Agreement makes a number of improvements to the FTA, including more precise North American content rules and a strengthening of the dispute-settlement system. NAFTA will:

- broaden Canadian trade opportunities and foster an outward-looking and competitive domestic economy,
- provide Canadian exporters with greater access to the Mexican market,
- promote Canadian interests on the U.S. market, and
- enhance investment opportunities in Canada.

This paper is an economic assessment of NAFTA from a Canadian perspective. Chapter 2 describes the main benefits of trade liberalization that Canada can be expected to reap through another step forward. Chapter 3 reviews the basic economic facts about the three North American economies and describes the progress and performance of the Mexican economy in a North American context. This information is essential in assessing the implications of freer trade for the three North American economies. Chapter 4 assesses NAFTA from a Canadian viewpoint and discusses its likely economic effects on the Canadian economy. Chapter 5 describes adjustment pressures likely to result from NAFTA, and puts their likely scale in perspective. Chapter 6 sums up the key messages of the document.

CHAPTER 2: GAINS FROM FREER TRADE: THE CANADIAN INTEREST IN NAFTA

Trade liberalization has progressed steadily in the world economic order since the end of the Second World War for one simple reason: freer trade means higher living standards. This chapter describes both the sources of gains from freer trade and trends in world and Canadian trade liberalization. It also situates trade liberalization under NAFTA in the context of this worldwide evolution.

SOURCES OF THE GAINS FROM FREER TRADE

Gains from freer trade arise from many sources. Freer trade allows firms to specialize in areas of comparative advantage and gives consumers access to lower-priced goods. By opening larger markets, firms are able to exploit economies of scale and become more competitive. Finally, formalized trading agreements reduce uncertainty, which makes it easier to exploit trade opportunities.

Efficiency gains in consumption and production

Trade liberalization brings about more efficient use of productive resources as each country increases production of those tradeable goods and services in which it has a comparative advantage. The elimination of trade barriers encourages countries to produce and export goods and services that are relatively less costly to produce domestically, and to import those that are relatively more expensive to produce at home.

The elimination of trade barriers also favours consumers by lowering prices of both imported goods and domestically produced consumer goods that compete with them. Further reductions in consumer prices are also possible due to lower costs for imported intermediate inputs.

Economies of scale

By giving domestic producers access to a larger consumer market, freer trade makes possible the exploitation of larger-scale and more specialized production lines that reduce unit costs of production. For a country with a relatively small domestic market like Canada, this source of gain from liberalized trade is critical. Trade liberalization made possible by GATT tariff reductions, the FTA and now NAFTA are crucial to Canada's well-being. Smallest in population of the three NAFTA countries, Canada is well placed to seize the additional opportunities the Agreement provides to further rationalize production, thus lowering costs and encouraging more efficient sectors of the economy to employ more resources.

Competitive effects

Greater exposure to international opportunities and competition encourages price flexibility and faster response to market changes. Increased access to foreign markets, combined with a more competitive environment, also encourages innovation in business operations and stimulates investment in research and development of new technologies by increasing expected returns.

Reduced uncertainty

Barriers to trade and investment make access to foreign markets uncertain. By clarifying trade and investment rules, trade agreements diminish such uncertainty, encourage investment and risk-taking, and increase Canada's attractiveness as a place to invest.

INTERNATIONAL EXPERIENCE OF GAINS FROM FREER TRADE

The countries of the Organization for Economic Co-operation and Development (OECD) traded more than \$7 trillion worth of goods and services in 1990. Over the period 1961 to 1990, the volume of trade expanded by about 500 per cent, compared with an increase in OECD output of 180 per cent.

Canada, the U.S. and Mexico are not the only countries to seek faster economic integration through the creation of regional free trade areas. The European Community (EC), created in 1957, has increased its membership to 12 countries. The Scandinavian countries, together with Austria, Switzerland, Liechtenstein and Iceland are all members of the European Free Trade Association (EFTA), created in 1960. In 1982, Australia and New Zealand signed the Closer Economic Relation (CER) agreement stipulating the gradual phase-out of all tariff barriers and the harmonization of other policies affecting trade. The Canada-U.S. FTA was concluded in 1988. Less developed nations have also adopted the idea of trade liberalization. The Association of South-East Asian Nations (ASEAN), comprising Thailand, Malaysia, Singapore, Indonesia, the Philippines, and Brunei was created in 1976. More recently, the countries of South America have also embraced the idea of regional economic integration. Mexico and Chile ratified an Agreement of Economic Complementarity in September 1991 that stipulates the phase-out of trade barriers over a period of four years. Brazil, Argentina, Paraguay and Uruguay have negotiated a regional trade agreement (MERCOSUR), as have the Andean countries: Bolivia, Peru, Ecuador, Venezuela and Colombia. Governments from Costa Rica, El Salvador, Guatemala, Honduras, Mexico and Nicaragua have also reached agreement on the creation of a free trade area.

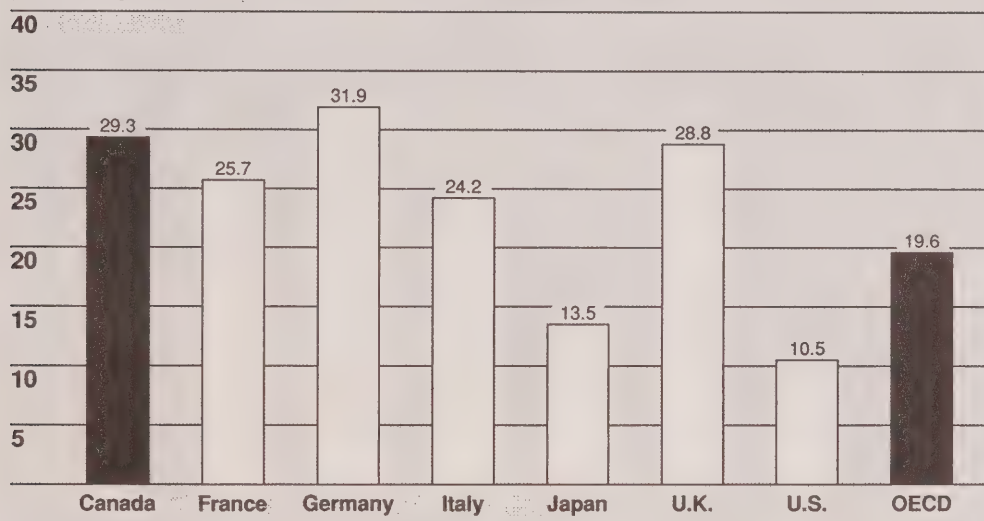
Trade spurs economic growth. The European Community illustrates most impressively the positive effect of trade on growth. The OECD has estimated that the economies of scale made possible by the existence of a large integrated European market increased productivity in the major EC countries by nearly 12 per cent. Further, the Commission of the European Communities has estimated that the creation of the internal market planned for Europe in 1992 will result in income gains of at least 6.5 per cent of the community's gross domestic product (GDP).² These estimated gains do not include the "dynamic" gains from an internal market because of increases in the stock of capital. Such economic dividends have encouraged a number of other countries, both small and large, to apply to join the EC.

CANADIAN EXPERIENCE OF GAINS FROM FREER TRADE

Canada has been in the forefront of trade liberalization, as befits a country so reliant on international markets. Canadians have come to rely increasingly on foreign markets as a means to enhance their standards of living. Since the Second World War, the volume of Canadian trade in goods and services as a share of GDP has risen by about 70 per cent. Chart 1 shows that Canada ranked as the second largest exporter among the G-7 leading industrial countries in 1989. On a per capita basis, as shown in Chart 2, Canadian trade is the largest among the G-7 countries, almost 60 per cent above the average for the OECD.

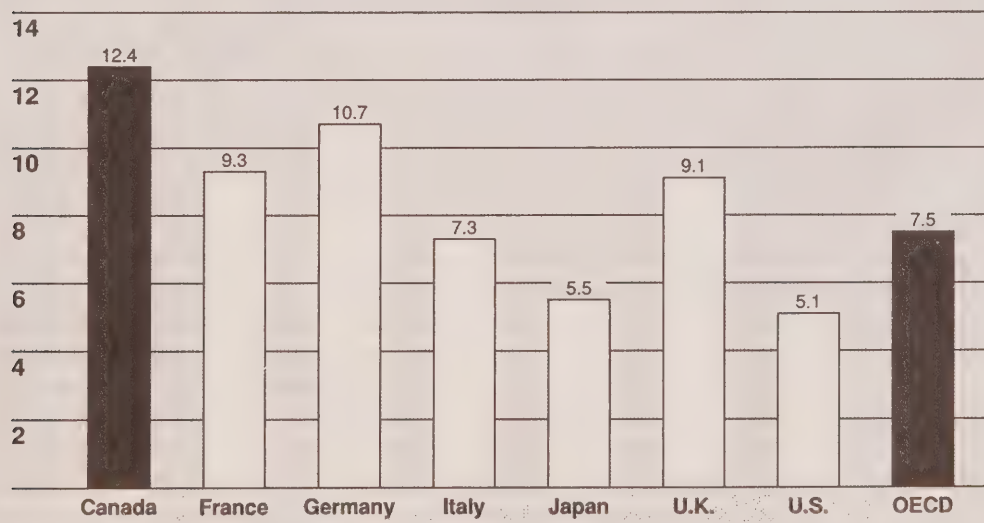
² Commission of the European Communities, *European Economy*, No. 44, October 1990.

Chart 1
Export orientation:
Export as a per cent of gross domestic product, 1989
percentage of GDP



Source: OECD, *National Accounts 1960-90, 1992*.

Chart 2
Importance of foreign trade:
Exports *plus* imports per capita, 1989
thousands of dollars



Sources: OECD, *National Accounts, 1992*; OECD, *OECD Economic Surveys – Germany, 1991*.

This growth in Canadian trade, fuelled by growing international markets, falling trade barriers, and successful Canadian efforts to exploit these opportunities, has helped propel Canada to its privileged place among the richest and most prosperous nations in the world. Canadians have the second-highest standard of living in the G-7 after the United States, and enjoy the best quality of life among all countries, according to the United Nations' Human Development Index.

The 1985 report of the Royal Commission on the Economic Union and Development Prospects for Canada emphasized the role of international trade in Canadian development and growth:

It is through the gradually increasing exposure of Canadian producers to competitive world market forces that the Canadian economy, as a whole, has become more productive. Trade and trade policy, have also helped to improve Canadians' standard of living by expanding the markets for Canadian producers and hence the economic scale of their operations, by providing us with imported goods that would be more expensive to produce domestically, and by improving the quality of employment.³

A 1992 study prepared for the C.D. Howe Institute also confirms that there have been gains from freer trade for Canada.⁴ Analyzing the FTA, the study concludes:

Canada's exports to the United States over the FTA's first three full years of operation performed the strongest in those sectors that were liberalized by the agreement – particularly non-resource-based manufacturing.

Imports into Canada also rose faster in those sectors that were liberalized under free trade.

Canada's trade balance with the United States seems to have been more favourable than with the other regions over that period.

The evidence strongly suggests that free trade with the United States is crucial to the development of high value-added industries.

THE CHANGING NATURE OF TRADE AND TRADE LIBERALIZATION

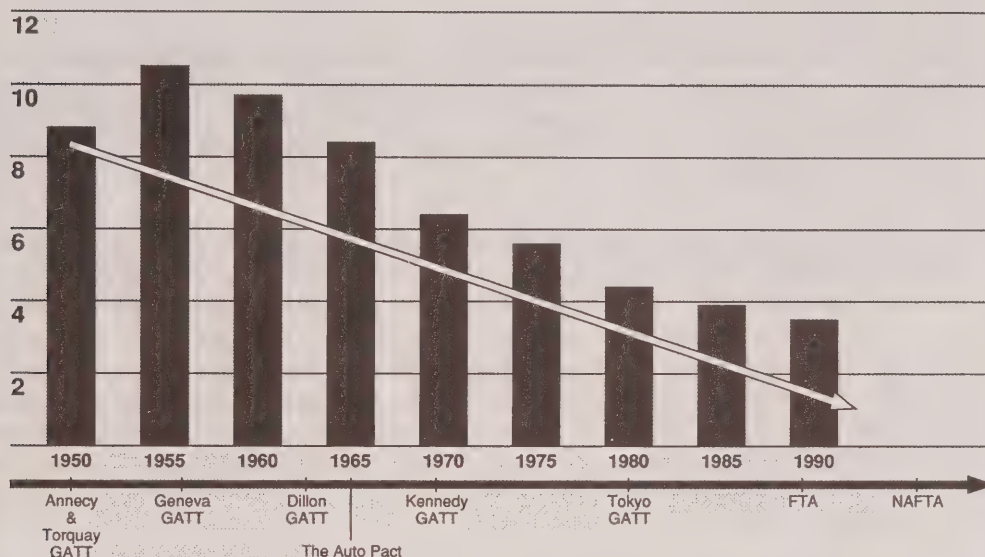
Trade liberalization has been a dynamic ongoing process in Canada. Successive rounds of multilateral trade negotiations and regional negotiations have worked together to reduce barriers and promote liberalization. As shown in Chart 3, Canadian rates of tariff declined from a peak of 10 per cent in 1955 to less than 4 per cent in 1990.

The focus of trade negotiations has also changed considerably over recent decades, reflecting changes in trade practices and in the types of barriers to trade. Since the Geneva Round in 1947, the nature of trade has changed substantially owing to the increase in intra-industry trade, the expansion of firms to become multinationals, the increased mobility of capital, the foreign control of investment, trade-related aspects of intellectual

³ Royal Commission on the Economic Union and Development Prospects for Canada, Report, Volume One, Minister of Supply and Services Canada, Ottawa, 1985, p. 234.

⁴ Schwanen, D., *Were the Optimists Wrong on Free Trade? A Canadian Perspective*, C.D. Howe Institute, Commentary No. 32, October 1992.

Chart 3
Canadian duty collected as a percentage
of imports: 1950 to 1990



Source: Department of Finance (1992).

property, and the growing share of services in total trade. At the end of the Second World War, international transactions consisted mainly of the trade of merchandise, and tariffs were the chief means of protection used by most countries. With tariffs, it was clear which countries were more protective, which less. The OECD recently suggested tariffs will probably no longer be a serious obstacle to international trade by the end of the century. Although there is no denying that the world economy has become much more integrated through successive GATT rounds, non-tariff barriers have replaced tariffs as the primary means of restricting trade.

Between 1966 and 1986, the proportion of imports by the developed countries that faced non-tariff barriers, mainly quotas, increased from 25.3 per cent to an estimated 48 per cent.⁵ Over the same period, developed countries increased their imports by 186 per cent, bringing them to \$2.8 trillion in 1986. More than a trillion dollars worth of imports were thus covered by non-tariff barriers. Non-tariff barriers have taken new forms and become much harder to monitor. Voluntary export restraints, anti-dumping duties, customs clearance procedures, procurement policies, and advertising restrictions are but a few examples. Countries, therefore, need more detailed trade agreements than before to monitor trade barriers efficiently.

The continued development of an open, rules-based international trading system is essential to allow countries to take advantage of their relative strengths. Such a system provides greater stability of access and allows for the consistent interpretation of

⁵ Laird, S. and Yeats, A., "Non-tariff Barriers of Developed Countries, 1966-1986", *Finance and Development*, March 1989.

international rules, two benefits that serve all trading countries but are particularly beneficial to smaller ones. Canada, for example, has found the dispute-settlement provisions of the FTA effective as a basis for defending and promoting Canadian export interests in the U.S. market.

The importance of investment

Investment, like trade, is critical for Canada's prosperity. It leads to increased production, higher productivity, more high-skill jobs and larger incomes, and thus to growth in living standards. Chart 4 illustrates the relationship between capital formation and growth in output per capita in Canada, Japan, the United States, and the European group of OECD countries.

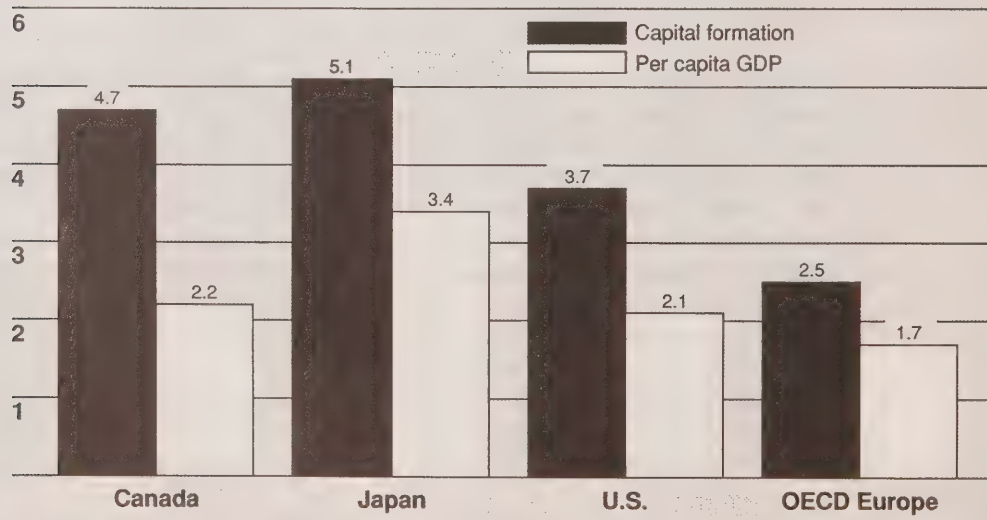
Increased international investment flows have been a feature of globalization over the last decade. They grew more rapidly than either world trade or world output, and are now an important complement to domestic investment in many countries. Cross-border investment has two forms: direct and portfolio. Direct investment is defined as the kind that allows the investor to influence or have a voice in the management of an enterprise. Foreign direct investment (FDI) helps a recipient country by facilitating access to markets, technology transfer, improved opportunities and returns for skilled workers, and the sharing of advanced management techniques. Portfolio investment consists of the ownership of financial assets that entails little or no control of the enterprises.

Table 1 shows Canadian direct investment abroad increased by 60 per cent, to \$86.7 billion, between 1985 and 1990. Foreign direct investment in Canada increased only slightly less proportionately, rising by 45 per cent, to \$125.3 billion (about 19 per cent of

Chart 4

Per capita output growth and increase in gross fixed capital formation: 1980 to 1989

average per cent change at annual rate



Source: OECD, *National Accounts 1960-1990*, 1992.

Table 1
Canada's international investment position: 1985 and 1990

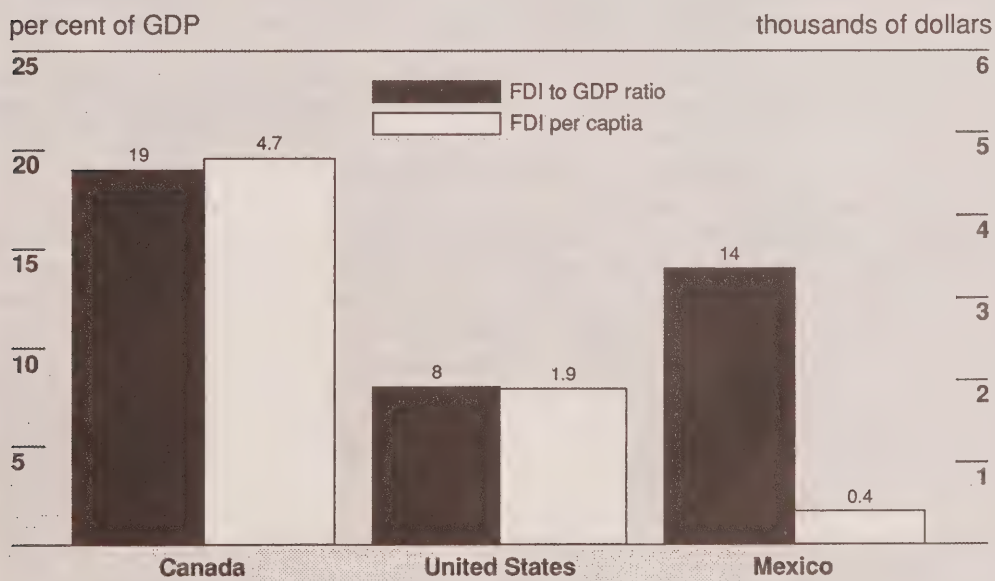
	1985	1990
	(billions of dollars)	
Canadian direct investment abroad	54.1	86.7
Foreign direct investment in Canada	87.2	125.3

Source: Statistics Canada, *Canada's International Investment Position*, cat. 67-202.

GDP). Canadian direct investment abroad was concentrated in the financial sector, wood and paper products, and non-ferrous metals. Foreign direct investment in Canada was concentrated in petroleum and natural gas, finance, and iron products.

Firms engaged in FDI face higher costs than firms whose operations are limited to one nation, owing to such expenses as managing geographically widespread operations, and dealing with foreign languages, cultures, technical standards, and customer preferences. To overcome these extra costs, firms undertaking FDI must have advantages over rivals: economies of scale, superior product technology, or better management techniques. FDI offers the host country the opportunity to raise the competitiveness of its domestic firms through the diffusion of this new know-how.

Chart 5
Foreign controlled investment stocks in North America, 1990



Sources: Statistics Canada, *Canada's International Investment Position*, cat. 67-202; U.S. Department of Commerce, *Survey of Current Business* (June 1991); Banco de Mexico, *The Mexican Economy* 1991.

Of the three NAFTA countries shown in Chart 5, Canada's FDI on a per capita and GDP basis is the highest. Indeed, FDI per capita was 2.5 times larger in Canada in 1990 than in the U.S. The ratio of FDI to GDP stood at 19 per cent for Canada, 8 per cent in the U.S., and 14 per cent in Mexico.

NAFTA: WHY IS CANADA IN?

The principal elements of the NAFTA from a Canadian point of view are summarized in Annex 1. In negotiating this agreement, Canada had three main objectives:

- extend the FTA to include the fast-growing Mexican market,
- safeguard, improve and clarify certain provisions of the FTA, and
- preserve Canadian commercial interests in the U.S. market and Canada's attractiveness as a place to invest.

Extending the FTA to Mexico

The reduction of Mexican trade barriers will provide new markets and opportunities for Canadian goods and services. Canadian firms will be able to participate in, and expand sales in, sectors that were previously highly restricted.

- Mexico has agreed to phase out virtually all tariffs on Canadian exports entering Mexico. The tariff reductions will either be immediate or generally in equal annual cuts over five to ten years. Mexico has also agreed to eliminate import licences for Canadian goods entering Mexico.
- Canadians will have the opportunity to bid for major Mexican government procurement contracts. NAFTA also provides for trade liberalization in a number of services. NAFTA limits Mexico's use of restrictive trade practices in the energy sector. It contains disciplines that prohibit Mexico from applying discriminatory border restrictions and exports taxes.
- Mexico will reduce its investment restrictions in a wide range of sectors. The agreement includes arbitration procedures so that disputes between investors from a NAFTA country and a NAFTA government may be settled through international arbitration. This will provide Canadian investors with added confidence and security.

NAFTA will create the biggest free trade area in the world, exceeding the European Community in both population (about 361 million for NAFTA, against 329 million for the EC) and production (about \$7,500 billion combined GDP for NAFTA, compared to \$6,682 billion for the EC). Direct Canadian gains from NAFTA will initially be modest because, as outlined in Chapter 3, Canadian-Mexican trade was only \$2.8 billion in 1990 (less than 1 per cent of our total trade). But the tripartite agreement will ensure that Canadian exporters have access to the rapidly growing Mexican market. Mexican pre-NAFTA trade barriers against Canadian products are substantially higher than Canadian trade barriers against Mexican products. More than 70 per cent of Mexican imports coming to Canada are already duty-free. Clearly, there are also dynamic, medium-term advantages in forging freer links with Mexico now to benefit from a resurgent Mexican demand resulting from accelerating economic growth. Mexico has the potential to follow the example of the Asian "tigers" – South Korea, Hong Kong, Taiwan, Singapore – and become a highly competitive economy.

A key difference between the FTA and NAFTA, discussed in Chapter 4, is that the first involved two developed economies and major trading partners, while the second is an extension to accommodate a less developed country with low wages and with less fully developed trading links. Do the benefits from freer trade continue to occur when high wage developed countries trade freely with low-wage less developed countries? The unambiguous answer is yes. It would not make sense to argue that highly developed countries, with an experience of successful management of their economies resulting in high living standards, could not compete with a less developed country facing a variety of impediments – both economic and policy related. Free trade allows both types of economies – developed high-wage, less-developed low-wage – to further specialize and raise their living standards.

Safeguarding and improving the gains made in the FTA

NAFTA not only safeguards the important gains Canada made under the FTA, but also improves on some of the provisions of the Canada-U.S. agreement.

- NAFTA preserves the Auto Pact. Canadian ability to provide government social and health services and to promote cultural industries are undiminished. The FTA continues to govern agricultural trade between Canada and the United States.
- NAFTA provides for clearer rules to govern North American trade. They will reduce the risk of unilateral interpretation by customs officials and diminish the use of the dispute-settlement provision. NAFTA strengthens the dispute-settlement system by introducing a provision to ensure that panels are established and their decisions implemented. It also contains clearer disciplines on energy regulators to avoid discriminatory actions and to minimize disruption of contractual arrangements.
- NAFTA extends coverage of cross-border trade in services to include transportation services and new areas of professional service. It also provides for better access to government procurement of goods, services and construction services.
- The inclusion of intellectual property in NAFTA is a major improvement over the FTA. Patents, trademarks, copyrights and trade secrets of Canadian companies and individuals will be protected under the new provisions.
- NAFTA contains a strong commitment to sustainable development and environmental protection and enforcement. It recognizes the right of each NAFTA country to maintain environmental standards higher than those recommended by international organizations. The agreement also recognizes that the NAFTA countries should not lower environmental, safety or health standards to attract investment.

Preserving Canada's commercial interests:

What does a U.S.-Mexico trade agreement mean for Canada

Canada's participation in the NAFTA is our best strategy to safeguard our interests in the United States and remain a prime location for international investment.

Canada is facing Mexican competition, not only in the domestic Canadian market, but, to a greater extent in Canada's most important export market, the United States, where about 18 per cent of our GDP is sold. The issue is therefore not whether such Mexican competition exists, but how best to deal with it. In NAFTA, Canada will have access to the entire continental market on virtually the same terms as the U.S. and Mexico. That will improve the terms on which Canada competes in the North American market and, at the same time, enhance Canada's attractiveness for investment aimed at that market.

In the absence of a NAFTA, an agreement between only the U.S. and Mexico was probable, leading to the so-called hub-and-spoke system.⁶ The United States would have been at the hub of separate free trade arrangements with the two spokes, Canada and Mexico. As the hub, the U.S. would have become the preferred location for investment, because it would enjoy better access to all three markets than either of the spoke countries.

Through NAFTA, all three partners can seize trade and investment opportunities in the whole North American market. As noted by W.G. Watson:

The major effects of a trade deal that includes Mexico will be felt in the U.S. market. There is little Canada can do to keep the U.S. from granting Mexico trade privileges similar to those won under the FTA. The domestic debate should therefore concern how to adjust to a North American Free Trade Area, not how to avoid it.⁷

Unlike a hub-and-spoke system, NAFTA protects and enhances the ability of Canadian exports to compete with Mexican products in the U.S. and Mexico and with U.S. products in Mexico. It allows Canada to become more competitive by having access to lower cost inputs, and it helps to insure that Canada remains an attractive investment location. These points are expanded below.

Diversion of U.S. purchases from Canada to Mexico

In a hub-and-spoke system, there would likely have been some diversion of U.S. import demand from Canada to Mexico, harming Canada's export potential. This would have occurred as the U.S. and Mexico would likely have negotiated arrangements favouring some Mexican products over their Canadian counterparts in the U.S. market.

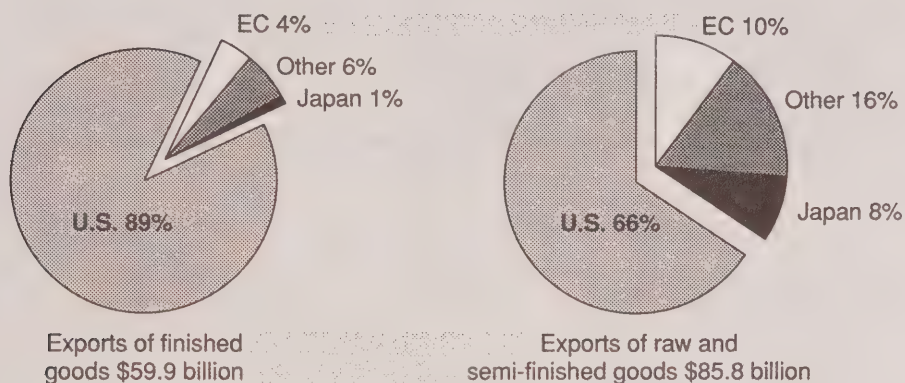
Canada can ill afford to have the U.S. divert purchases from Canada to Mexico. The U.S. not only accounts for close to three-quarters of Canada's exports, it is also the dominant market for Canadian exports with high added value. The sale of these goods to the U.S. is our best chance to go beyond export of natural resources and create high-paying, technology-driven employment opportunities. Chart 6 shows that in 1991 the U.S. purchased 89 per cent of the \$59.9 billion of finished goods that Canada exported. By comparison, as Chart 7 illustrates, virtually all Canadian exports to Japan, and a dominant portion of exports to the European Community are still raw materials and semi-finished goods. Moreover, the U.S. is the only market that has demonstrated strong potential for growth in the export of Canadian finished goods with high added value. Between 1980 and 1991, exports of finished goods to the U.S. grew 216 per cent, increasing from \$16.8 billion to \$53.3 billion (Chart 8). Over the same period, Canadian exports of finished goods to the rest of the world increased only 31 per cent.

Owing to the high volume and composition of Canadian trade with the U.S., even a remote possibility of U.S. trade diversion to Mexico at the expense of Canadian exports was therefore reason enough for Canada to join NAFTA. The only way to counterbalance this diversion of U.S. imports from Canada in the absence of NAFTA would have been for Canadian producers to lower their export prices, leading to a loss in income for Canadians.

⁶ Ronald J. Wonnacott, *Canada and the U.S.-Mexico Free Trade Negotiations*, C.D. Howe Institute, Commentary No. 21, September 1990.

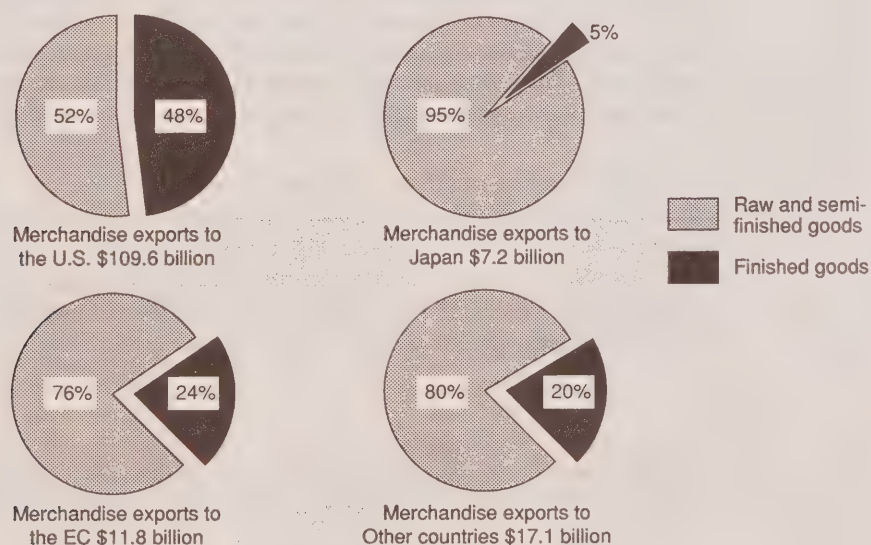
⁷ Watson, W.G., "North American Free Trade: Lessons from the Trade Data", *Canadian Public Policy*, XVIII No. 1, March 1992.

Chart 6
Canadian exports by stage of processing
and by destination, 1991



Source: Statistics Canada, *Summary of International Trade*, cat. 65-001.

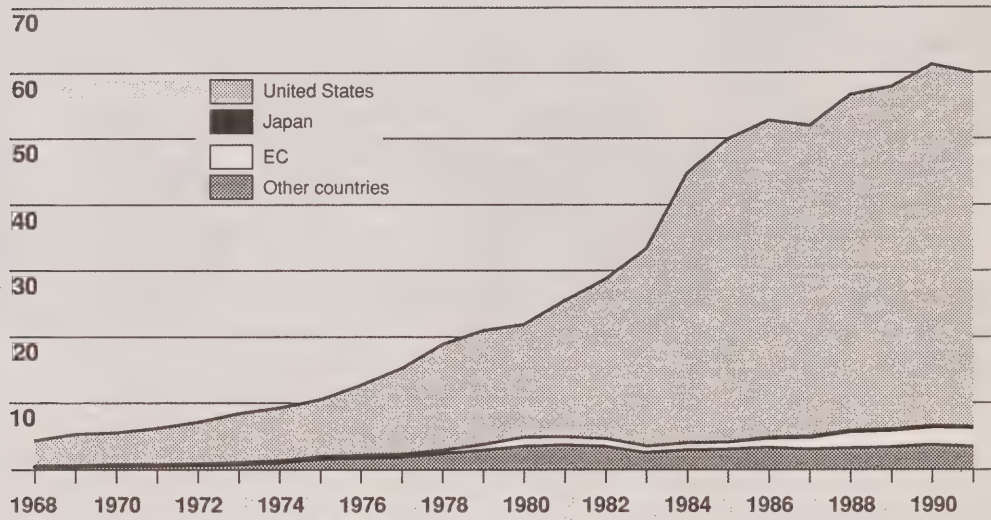
Chart 7
Exports to the United States, Japan, the EC and
all other countries by stage of processing, 1991



Source: Statistics Canada, *Summary of International Trade*, cat. 65-001.

Chart 8
Exports of finished goods to the United States, Japan, the EC
and all other countries, 1968-1991

billions of dollars



Source: Statistics Canada, *Summary of International Trade*, cat. 65-001.

Diversion of Mexican purchases from Canada to the U.S.

Canadian exports would also have faced the same trade-diversion problem in the Mexican market as in the U.S. market. That is, under a hub-and-spoke system, preferential treatment given to U.S. exports would divert trade away from Canadian suppliers to U.S. suppliers in the Mexican market. Such trade diversion might not be important in the short run, as Canada does not currently sell much to Mexico that the U.S. could sell instead. The advantage of NAFTA is that it not only prevents potential loss of our future sales in the expected rapid expansion of the Mexican market, but also provides an opportunity for Canadian firms to participate in the expansion.

Canada's need for intermediate goods

Under a hub-and-spoke system, the U.S. would gain a competitive edge over Canada by obtaining lower cost, duty-free inputs from Mexico to feed its industrial growth. Lower input costs on imports from Mexico would have improved the competitive position of U.S. products, making it more difficult for Canada to compete against the U.S. – in not only the U.S. market but also in the Canadian market.⁸

⁸ While Canada could unilaterally eliminate its trade barriers on inputs from Mexico, the effect would not be the same as under NAFTA because of rules of origin problems. For instance, a Canadian good produced with intermediary inputs from Mexico and destined to the U.S. market might not meet FTA rules of origin. This problem would not occur under common North American rules of origin within NAFTA.

Canada's ability to attract investment

Ensuring that Canada remains an attractive place to invest is one of the most important reasons for our participation in NAFTA. In a hub-and-spoke system, investors would have been induced to choose the U.S. as the only country with duty-free access to all three North American markets. Further, some firms – including Canadian ones – could have been tempted to invest in Mexico to gain more favourable access to the U.S. market.

Canada's attractiveness as a North American base in which to invest is improved because of its partnership in NAFTA. Canada's natural advantages – skilled labour, excellent infrastructure, highly sophisticated services, etc. – will encourage foreign and Canadian investors to invest and locate in Canada, develop and expand production here and ship goods and services throughout North America. This is a major benefit of the agreement.

CHAPTER 3: THE NORTH AMERICAN ECONOMIES

The economic implications of the North American Free Trade Agreement depend not only on the agreement but also on the characteristics of the three economies.

While the economies of Canada and the United States have much in common, Mexico's is quite different from them, particularly in population and labour force characteristics, the quantity of capital, productivity, and worker compensation. These differences are reflected in the trade structures and are important determinants of the economic gains from trade for the three countries. This chapter looks at both the economic characteristics and trade structure of the three NAFTA members.

ECONOMIC CHARACTERISTICS

Population and labour force

Canada, the United States and Mexico had a combined population of about 361 million in 1991. By country, the populations were: Canada 27.0 million, United States 252.7 million, and Mexico 81.2 million.

Mexico's population has grown at a rate of almost 3 per cent a year over the past 30 years, compared with a rate only slightly above 1 per cent in Canada and the U.S. Mexico thus has a much younger population than its two partners, as shown in Chart 9. Over 60 per cent of the Mexican population is less than 25 years old, compared with less than 40 per cent in Canada and the U.S.

Differences in age distribution affect the size and composition of labour forces. In Canada and the U.S., the labour force accounts for 50 per cent of the population, in Mexico about 36 per cent, including people employed in the informal sector of the Mexican economy.⁹ The younger age distribution of the Mexican population accounts for about two-thirds of this difference in the population participation rate. Lower employment opportunities are also responsible for the lower participation rate in Mexico. In 1991, the unemployment rate was estimated at about 17 per cent, compared with 10.3 per cent in Canada and 6.7 per cent in the U.S.¹⁰ In 1989, almost 34 per cent of the Mexican workforce was under age 25, compared with about 19 per cent in both Canada and the United States. Workers aged 35 to 55 were only 30 per cent of the Mexican work force, but 40 per cent of the Canadian and American work forces.

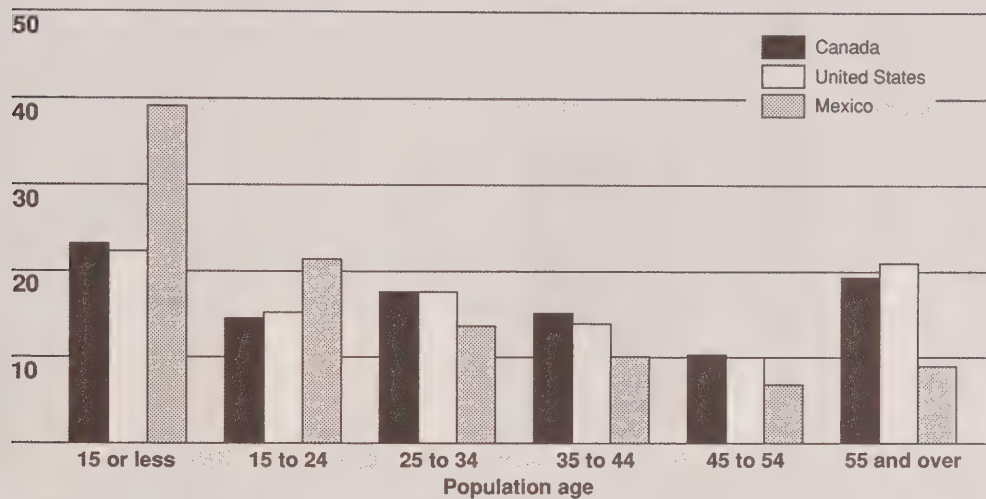
The education level of the Mexican labour force is also different. Only 5.3 per cent of the population aged 25 and over has a post-secondary education, compared with 37.4 per cent in Canada and 32.2 per cent in the United States.

⁹ The informal sector accounts for about 25 per cent of total employment according to results reported by the OECD [OECD, *Economic Survey of Mexico*, forthcoming].

¹⁰ The Mexican unemployment rate, as calculated by the National Institute of Statistics, Geography and Informatics (INEGI), includes the proportion of the labour force that performs involuntary short-time work or works at sub-minimum-wage income [OECD, *Economic Survey of Mexico*, forthcoming].

Chart 9
Age distribution of total population
Canada, United States and Mexico¹, 1989

percentage of total population



¹ 1988 for Mexico.

Source: International Labour Office, *Yearbook of Labour Statistics* 1991.

These differences in both the age structure and education levels are important factors in accounting for higher labour productivity in Canada and the U.S. than in Mexico. As explained in more detail in Chapter 4, labour compensation in the three economies needs to be adjusted for differences in productivity to derive a more accurate picture of relative labour costs.

The capital stock

Capital stock is a key determinant of productivity and hence cost of production. In determining the overall cost of production, the cost of capital and the relative productivity of capital among trading partners, must also be taken into account.

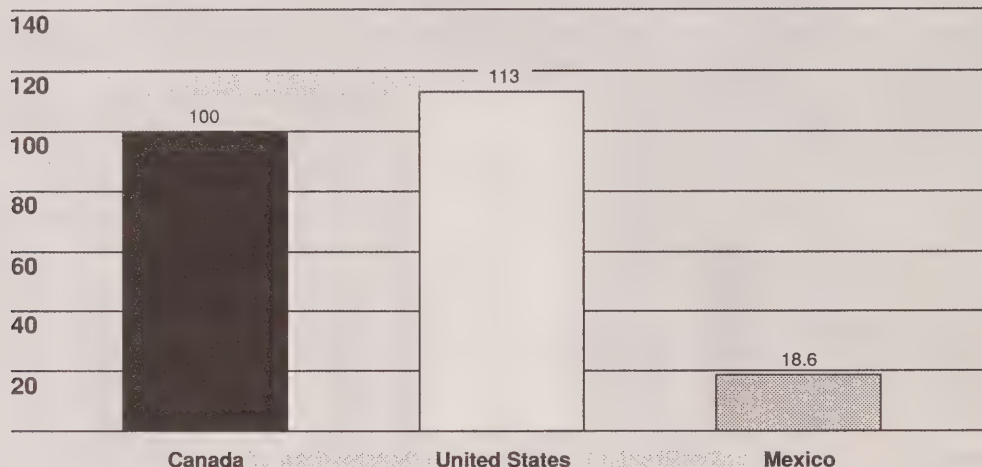
Mexico, in comparison with Canada and the United States, has a shortage of capital. Chart 10 shows the capital-labour ratios for each country. This ratio is a simple and rough measure to standardize, for comparison's sake, the amount of capital used to produce output in each of the three economies. As can be seen, Canada and the U.S. are quite similar and much more capital intensive than Mexico.

Foreign direct investment

Foreign investment can be an important component of the domestic capital stock. It takes two forms: portfolio investment, which means establishing a claim on an asset for the purpose of realizing a return, and direct investment, which means ownership carrying with it actual control. Chapter 2 made the point that foreign direct investment (FDI) may provide valuable external economies for the host country. Table 2 presents the FDI levels

Chart 10
**Comparison of the capital-labour ratios:
 Canada, United States and Mexico, 1989**

index – Canada = 100



Sources: Statistics Canada, *Flows and Stocks of Fixed Capital*, cat. 13-568; Munnell A. H., "How Does Public Infrastructure Affect Regional Economic Performance", *New England Economic Review* (Sept/Oct 1990); Department of Finance (1992).

Table 2
Origin of foreign-owned investment within North America, 1990

Countries of origin	Countries of destination		
	Canada	United States	Mexico
(millions of dollars)			
Canada	—	53,100	486
United States	80,400	—	22,261
Mexico	1	646	—

Sources: Statistics Canada, *Canada's International Investment Position*, cat. 67-202; U.S. Department of Commerce, *Survey of Current Business* (June 1991); Banco de Mexico, *The Mexican Economy* 1991.

of each of the three NAFTA partners among themselves. In 1990, the United States was the largest foreign investor in both Canada and Mexico. It accounted for 64 per cent of Canada's stock of foreign-owned capital and 63 per cent of Mexico's. Canada is the fourth largest source of direct foreign investment in the U.S. (behind the United Kingdom, Japan and the Netherlands), with its ownership of U.S. capital valued at \$53 billion, or about 7 per cent of all foreign-owned capital in the U.S. Investment ties between Canada and Mexico are not strong, with Canadian FDI of only \$486 million in Mexico and Mexican FDI of \$1 million in Canada. Finally, Mexico's ownership of foreign-owned capital in the United States is worth only \$646 million.

Chart 11 shows that Canada and the United States have considerably increased their ownership of capital in Mexico since the 1985 economic reforms introduced by the Mexican government. Under NAFTA, Mexico will reduce investment restrictions on Canadian and U.S. investors.

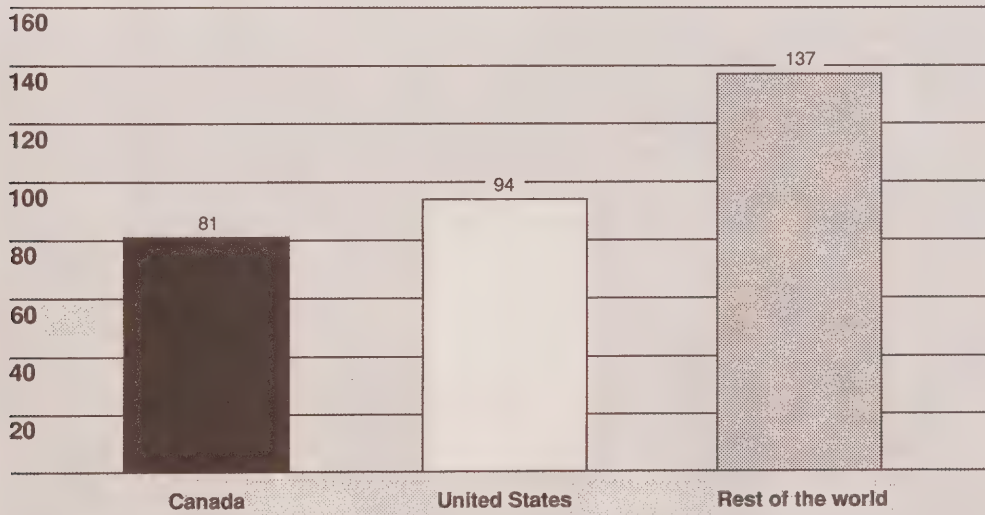
Gross domestic product

The Mexican economy, despite the country's large population, is small compared with the Canadian and U.S. economies. In 1991, GDP at current market exchange rates was \$674 billion in Canada, \$6,504 billion in the U.S. and \$324 billion in Mexico. A GDP about two times larger in Canada for a third of the population shows the considerable gap between Mexico's and Canada's per capita GDP (Chart 12). In fact, Mexican per capita GDP, is about one-sixth the Canadian or U.S. level. In addition, as Chart 13 shows, while Canada and the U.S. both registered significant per capita GDP growth during the 1980s, Mexico's per capita GDP actually declined at an average annual rate of 0.4 per cent during the decade.

Chart 11

Increase of foreign controlled capital stocks in Mexico: 1985 to 1990

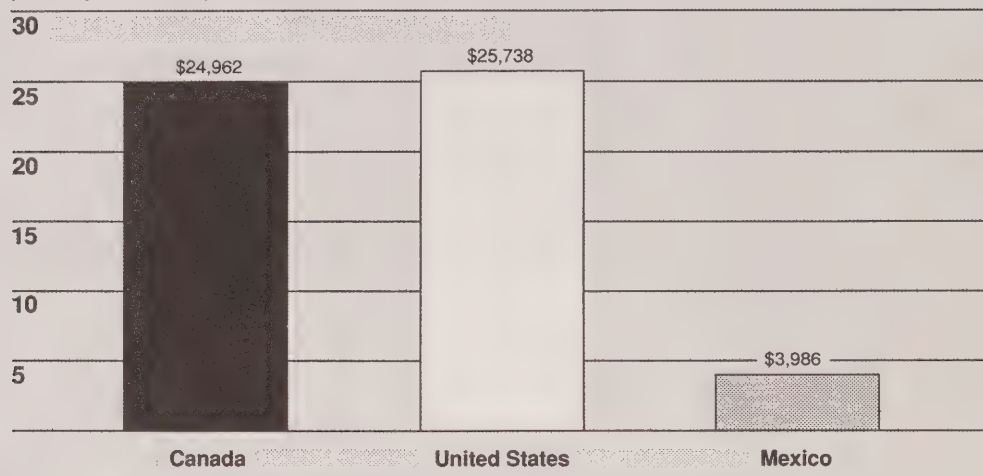
percentage increase



Source: Banco de Mexico, *The Mexican Economy 1991*.

Chart 12
Per capita GDP at market exchange rates:
Canada, United States and Mexico, 1991

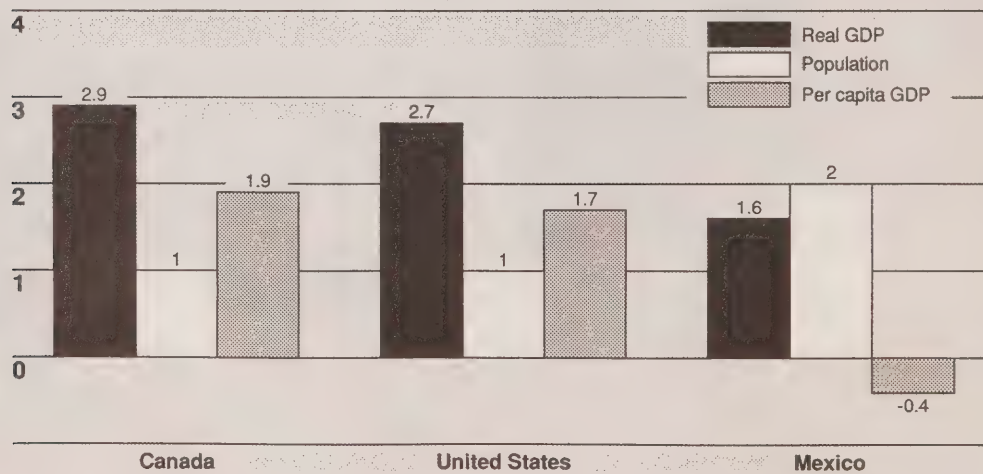
per capita GDP (thousands of dollars)



Sources: Statistics Canada, *Postcensal Annual Estimates of Population by Marital Status, Age, Sex and Components of Growth, for Canada, Provinces and Territories at June 1st and National Income and Expenditure Accounts*, cat. 91-210 and 13-001; U.S. Department of Commerce, *Survey of Current Business*; OECD, *Economic Survey of Mexico*, 1992.

Chart 13
GDP growth, population growth and per capita GDP growth:
Canada, United States and Mexico, 1980 to 1990

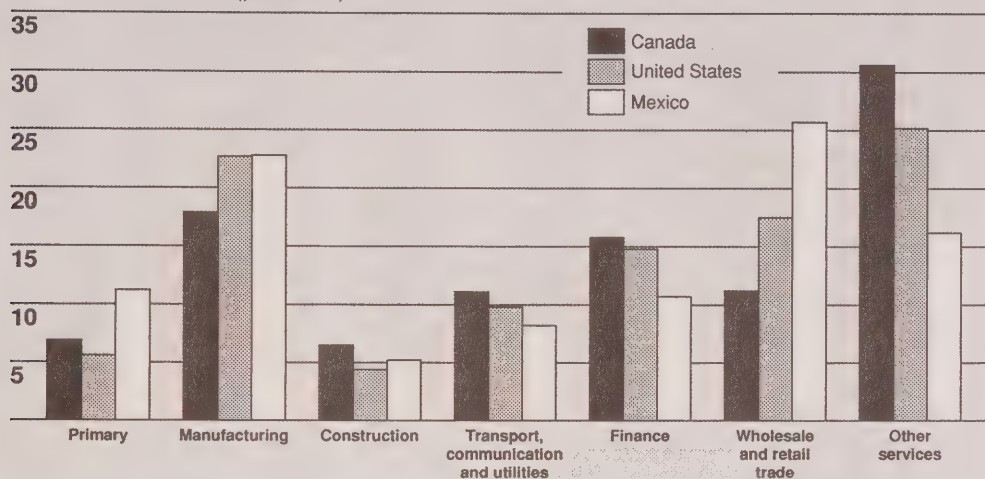
average annual growth rate (per cent)



Sources: Statistics Canada, *National Income and Expenditure Accounts and Report on the Demographic Situation in Canada*, cat. 13-001 and 91-209; International Monetary Fund, *International Financial Statistics* (1991); OECD, *Economic Survey of Mexico*, 1992.

Chart 14
**Broad structure of GDP,
 Canada, United States¹ and Mexico: 1990**

proportion of GDP (per cent)



¹ 1989 for the United States.

Sources: Statistics Canada, *Gross Domestic Product by Industry*, cat. 15-001; U.S. Department of Commerce, *Survey of Current Business* (April 1991); International Monetary Fund, *Recent Economic Developments in Mexico*, (1991).

Chart 14 shows that the structure of Mexican GDP differs significantly from that of Canada and the United States. In 1990, the primary sector (agriculture, forestry, fishing and mining) accounted for 6.9 per cent of GDP in Canada and 5.6 per cent in the U.S., compared with a much larger 11.1 per cent in Mexico. On the other hand, services (financial, transport, communication, utilities, trade, and other services) constituted a more important share of GDP in Canada (68.7 per cent) and the U.S. (67.3 per cent) than in Mexico (60.9 per cent). Table 3 presents comparative data on the main characteristics of the three North American economies.

TRADE WITHIN THE NAFTA AREA

Trade is much more intensive between Canada and the U.S. than between either country and Mexico. Chart 15 shows the movements of merchandise among the three countries. Canada's merchandise imports from the United States were 50 times greater than its merchandise imports from Mexico in 1990. Canadian merchandise exports to the U.S. were 175 times greater than those to Mexico. For the U.S., the gap between merchandise trade with its two partners was less pronounced, but merchandise trade with Canada (imports and exports) was at least three times greater than it was with Mexico.

Table 3
Comparative data: Canada, United States, Mexico

	Canada	United States	Mexico
Population			
1991 level (millions) ¹	27.0	252.7	81.2
Average annual growth rate, 1960 to 1990 (%)	1.3	1.1	2.9
Proportion of population (aged 25+) with post-secondary education (%)	37.4	32.2	5.3
Distribution by age (%)			
Under 15	23.2	22.3	39.1
15-24	14.5	15.2	21.4
25-34	17.6	17.6	13.6
35-54	25.4	23.9	16.9
55 and over	19.3	21.0	9.0
Total	100.0	100.0	100.0
Labour force			
1991 level (millions)	13.8	125.3	29.6
Average annual growth rate, 1980 to 1990 (%)	1.7	1.5	3.6
Unemployment rate, 1991 (%)	10.3	6.7	17.0
Distribution by age (%)			
15-24 ²	19.8	18.3	33.4
25-34	29.0	28.7	25.1
35-54	41.1	39.3	30.2
55 and over	10.1	13.7	11.3
Gross domestic product (GDP)			
1991 nominal GDP (\$Cdn billions)	674	6,504	324
1991 nominal per capita GDP	24,962	25,738	3,986
Real GDP growth rate, 1980 to 1990 (%)	2.9	2.7	1.6
Per capita GDP growth rate, 1980 to 1990 (%)	1.9	1.7	-0.4
Broad structure of 1990 GDP (%)³			
Agriculture, forestry and fisheries	3.0	2.5	7.5
Mining, quarrying, oil well industries	3.9	3.1	3.6
Manufacturing	17.9	22.7	22.8
Construction	6.5	4.4	5.2
Services	68.7	67.3	60.9
Transportation, communications and utilities	11.1	9.8	8.2
Financial services	15.8	14.8	10.7
Trade (wholesale and retail)	11.2	17.5	25.7
Other services	30.6	25.2	16.3
Total	100.0	100.0	100.0
Inflation			
Percentage change in consumer price index, 1991	5.6	4.0	22.7

¹ Mexican population is for 1990.

² Age group 12-24 for Mexico.

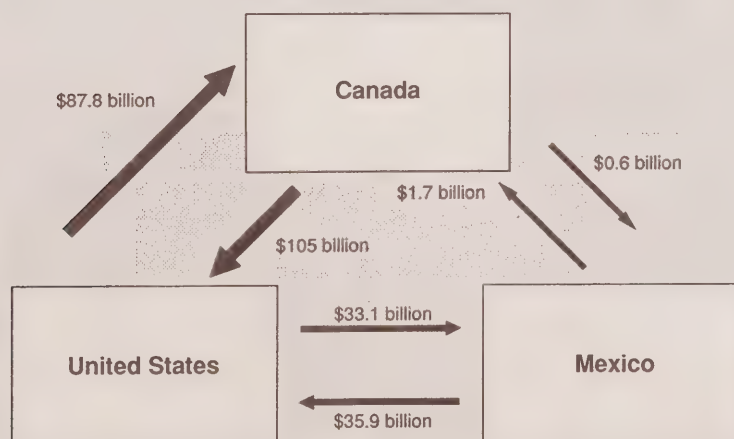
³ Data on U.S. GDP structure is for 1989.

Sources: Statistics Canada; International Monetary Fund; OECD; U.S. Department of Commerce; International Labour Office; Bank of Canada; UNESCO; CIEMEX-WEFA.

Mexico is nevertheless the main trading partner of both the United States and Canada in the rest of the western hemisphere. It accounts for 32 per cent of Canadian and 48 per cent of American trade with the region. On a worldwide basis, Mexico ranks third behind Canada and Japan as a trading partner of the U.S. Although the value of Canada's trade with Mexico is a small fraction of the value of trade we conduct with other nations, Mexico represents one of the fastest growing markets for Canadian exports. Chart 16 shows that since Mexico joined the GATT in 1986, Canada's exports to it have increased by 38.4 per cent, while they have increased only 17.4 per cent to the U.S. and 23.3 per cent to the rest of the world. With the removal of virtually all tariff barriers and import-licensing requirements on Canadian products under NAFTA, Canadian export growth to Mexico should continue to increase rapidly in the future.

In 1990, close to two-thirds of Canadian merchandise exports to Mexico consisted of manufactured goods and food products (Chart 17a). The other third was divided about equally among minerals, wood and paper products, and iron and steel products. Machinery and mechanical appliances, and transport equipment (largely autos and auto parts) accounted for 73 per cent of Canadian imports from Mexico (Chart 17b).

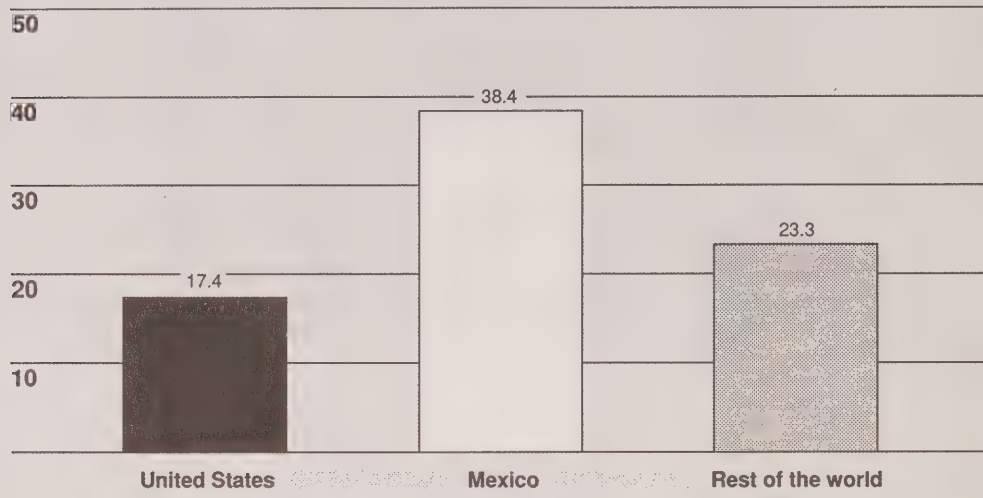
Chart 15
Value of intra North American merchandise trade, 1990



Sources: Statistics Canada, *Exports and Imports by Country*, cat. 65-003 and 65-006; International Monetary Fund, *Direction of Trade Statistics* (1990).

Chart 16
Growth in Canadian real exports to the United States, Mexico,
and the rest of the world, 1986 to 1990

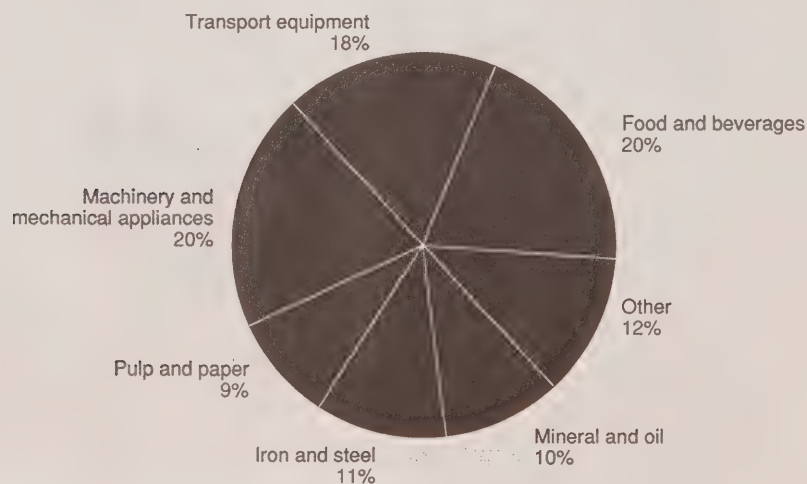
percentage increase



Sources: Statistics Canada, *Exports by Country*, cat. 65-003; Informetrica Limited, *Trade Price Deflators by Country* (1991).

Chart 17a
Canadian merchandise trade with Mexico, exports

Composition of exports
 1990 value = \$594 million



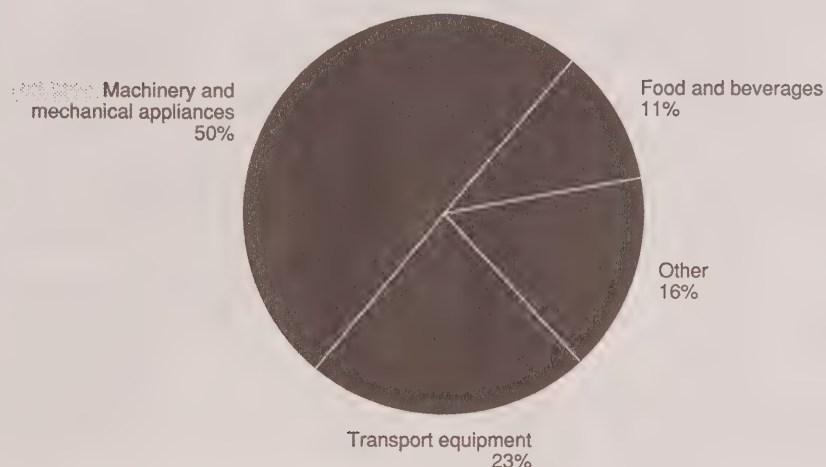
Sources: Statistics Canada, *Exports by Country*, cat. 65-003.

Chart 17b

Canadian merchandise trade with Mexico, imports

Composition of imports

1990 value = \$1,729 million

Sources: Statistics Canada, *Imports by Country*, cat. 65-006.**TRADE BARRIERS BETWEEN CANADA AND MEXICO**

In 1990, more than 70 per cent of Canadian imports from Mexico entered duty free. Average duty on all imports into Canada from Mexico was a modest 2.7 per cent, a rate lower than the average levied on imports from all countries (Table 4). The rate of duty on "dutiable" imports at 10.1 per cent was similar to that on imports from all countries.

Table 4

Tariff treatment of Canadian imports from Mexico and the world, 1990

	Mexico	All countries
Total imports (millions of dollars)	1,729.8	135,921.7
Dutiable imports (millions of dollars)	468.9	47,571.1
Duty free imports relative to total imports (%)	73.0	65.0
Average rate of duty on dutiable imports (%)	10.1	10.0
Average tariff rate on all imports (%)	2.7	3.5

Source: Department of Finance (1991).

In contrast to Canada, about 80 per cent of imports entering Mexico remained subject to tariffs in 1990. The average rate of Mexican tariff on dutiable imports was 13.1 per cent compared with a Canadian rate of 10 per cent. The average rate of duty on all Mexican imports was 10.5 per cent (Table 5), compared with a 3.5 per cent rate for all imports entering Canada (Table 4). Maximum tariff rates, however, have been reduced from 100 to 20 per cent since 1985. Moreover, the process of phasing out import licensing is continuing and less than 15 per cent of imports are now subject to licensing. In the main, licences are still required for importing some agricultural, agro-industrial and petroleum and derivative products.¹¹ It was estimated that import licensing was equivalent in its impact to a tariff at a rate of 0.3 per cent in 1990.¹² Under the NAFTA, tariffs and import licences on Canadian products will be phased out over ten years.

Table 5
Mexican trade liberalization, 1982 to 1990

	1982	1986	1990
Average rate of duty on dutiable imports	n.a.	22.6	13.1
Average tariff rate on all imports	16.4	13.1	10.5
Per cent of imports subject to licences	100.0	27.8	13.6
Per cent of imports subject to official reference prices ¹	—	7.2	abolished in 1988

¹ Official reference prices were the minimum prices set by the government for certain imports entering Mexico.

Sources: U.S. International Trade Commission, *The Likely Impact in the United States of a Free Trade Agreement with Mexico*, publication No. 2353, February 1991; International Monetary Fund, *Recent Economic Developments in Mexico*, October 24, 1991.

STRUCTURAL POLICY DEVELOPMENTS IN MEXICO

In the second half of the 1980s, Mexico's economic reform program made a radical break with the past. Until the early 1980s, Mexico had stuck to economic policies of reduced market competition, increased government control, and rising protectionism, policies in complete contrast to those pursued by Canada and the United States.

Mexican policies generally sought to substitute domestically produced products for imports behind restrictive trade barriers. The government intervened heavily in the economy to finance enterprises, often through direct state ownership or control, and regulate industrial sectors and individual industries. The discovery of large oil fields in the 1970s, coupled with rising oil prices, did not change this approach; indeed, Mexico borrowed heavily abroad to pursue it even more vigorously.

¹¹ International Monetary Fund, *Recent Economic Developments in Mexico*, op. cit.

¹² "The Effects of a Free Trade Agreement Between the U.S. and Mexico", study prepared for the U.S. Council of the Mexico-U.S. Business Committee by Peat Marwick Policy Economics Group (May 1, 1991).

The government increased subsidies to domestic companies and raised trade barriers. The number of public entities passed 1,000. The import-substitution policies, by sapping competition and introducing inefficiencies in the allocation of resources, discouraged domestic saving. Mexico borrowed abroad to make up the shortfall. World oil prices peaked in 1981, the same year import substitution peaked in Mexico. In 1982, the decline of world oil prices and the increase in world interest rates made Mexico's position untenable. Inflation, an overvalued currency, and significant government deficits led the world's commercial banks to stop lending. Mexican authorities announced in August 1982, the country's inability to fully service its external debt.

Mexico started abandoning import-substitution in 1983, slowly at first but more rapidly as world oil prices collapsed. In the past five years, Mexico has radically transformed its economy. As Jamie Serra Puche, the country's Commerce Minister, recently said: "We went from being one of the most closed economies in the world to one of the most open economies in the world in a very short period of time."

In 1986, Mexico was granted membership in the GATT. That year, Mexico's reforms moved towards a market-oriented open economy. The main economic objectives of a disciplined public sector would be price stability and increased resources for private-sector productive investment and modernization. Deregulation and privatization were also important components of this strategy. Some sectors of the Mexican economy responded dramatically to the new policies, in particular the maquiladora sector.

The Mexican government instituted the maquiladoras, or in-bond industries, in 1965 to offer jobs to Mexicans who could no longer perform seasonal work in the United States. They were the country's first experience with freer trade. Imports of components and raw materials for maquiladora operations enter Mexico free of duty, provided they are later exported. Once assembled or manufactured, the products are exported to their country of origin or a third country. American manufacturers pay U.S. tariffs only on the value added in Mexico.

It was only after Mexico liberalized trade and investment in the 1980s, however, that the maquiladoras enjoyed their major period of growth. The 1986-1990 period brought them unprecedented popularity with investors; firms nearly doubled in number to 2,014. In the same period, the number of maquiladora workers increased by almost 90 per cent, and value-added in maquiladora plants went up by about 180 per cent.

This change in direction has already brought many successes to Mexico. Unilateral lowering of trade and investment barriers has led to economic restructuring and stronger performance. Real GDP is expected to grow at an annual rate of 5.5 per cent in the 1991-1995 period, compared with only 1.3 per cent in the 1986-1990 period. The public-sector account was in balance in 1991. The annual rate of inflation is down to 23 per cent from a daunting high of 137 per cent in 1987. Increased confidence has brought not only high levels of foreign investment but also repatriation of Mexican capital invested abroad during the years of economic instability. Net private capital inflow in 1991 was five times the 1989 level. A free trade area with Canada and the United States will lock in those benefits and will open new opportunities to improve Mexico's economic performance and its citizens' well-being.

NAFTA will extend and strengthen the domestic economic reform program launched in the mid-1980s. It will gain greater recognition abroad of Mexican achievements and attract the investment needed to keep up the momentum. With NAFTA, the benefits of trade and investment liberalization will be more evenly spread throughout the economy, rather than concentrated in the maquiladora region as they are now. A stronger, more prosperous Mexico will benefit both the United States and Canada.

CHAPTER 4: ECONOMIC IMPLICATIONS FOR CANADA

This chapter examines the economic implications of NAFTA for Canada. As part of this assessment it takes up the critical question of whether Canada can compete with low-wage Mexico. This analysis leads to the conclusion that many advantages will accrue to Canada as the NAFTA arrangements come into effect.

- Mexican competition with Canadian products is becoming increasingly intense, particularly in the large U.S. market, which is the lifeblood of Canadian exporters – this is a fact of economic life. The analysis below shows that Canada is already competitive with Mexico in many sectors and will likely become increasingly competitive under NAFTA.
 - Quantitative studies indicate the Canadian economy will benefit increasingly from NAFTA over time.
 - A study of Portugal and Spain's joining the European Community in 1986 suggests that trade liberalization between developed and less developed countries can be beneficial for **all** joining parties.
-

CANADIAN COMPETITIVENESS

With or without NAFTA, Canada currently competes and will continue to compete with Mexico in the large and rich U.S. market. Canada's present cost structure relative to Mexico's shows Canada is competitive. Membership in NAFTA will make Canada even more competitive.

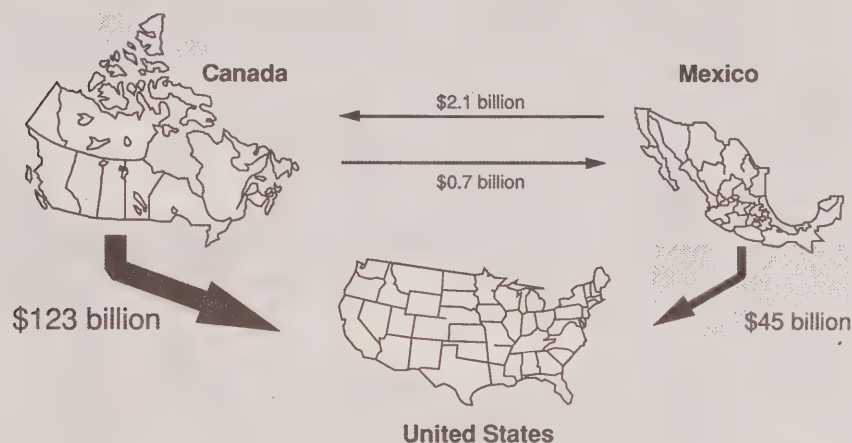
Growing Mexican competitiveness

As shown in Chart 18, Mexico's penetration of the Canadian market is relatively slight: Mexican exports of both goods and services to Canada amounted to only \$2.1 billion in 1990. Canada's presence in the Mexican market is even smaller: Canadian exports to Mexico were only \$0.7 billion in 1990. These low trade levels do not imply, however, that we are shielded from competition with Mexico; on the contrary, we are in direct and increasing competition with Mexico in the U.S. market. In 1990, we exported goods and services worth \$123 billion, about 18 per cent of our gross domestic product, to the U.S., while Mexico's exports of goods and services to the U.S. totalled \$43 billion, about 15 per cent of the Mexican GDP. NAFTA is the key to ensure that Canada competes with Mexico on an equal footing in the U.S. market.

The extent of this competition depends upon the degree to which Mexico and Canada export similar products to the United States. The more similar products, the more easily U.S. buyers substitute one for the other. The potential scope of this competition can be measured with the help of an "index of similarity" of Canadian and Mexican exports to the U.S. market developed for the purpose of this study. Such an index, described in Annex 2, ranges from a low of zero, indicating no overlap (or "potential competition") of Canadian and Mexican products in the U.S. market, to 100, indicating complete correspondence of the composition of the two countries' exports there. This index is presented in Chart 19 for the years 1985, 1988 and 1990.

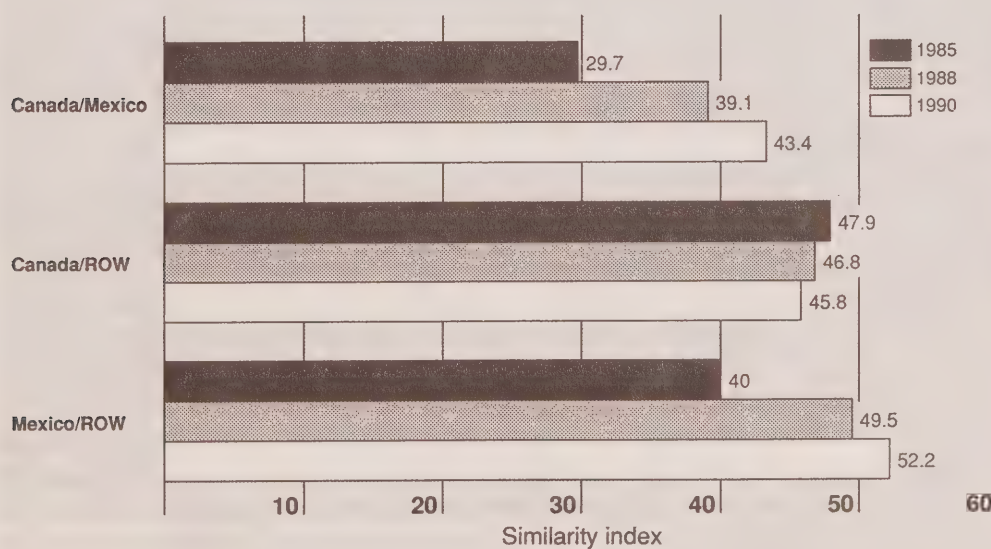
The index shows that the similarity between Canadian and Mexican exports to the U.S. has increased substantially, from 30 per cent to 43 per cent during the 1985-1990 period, a rise of close to 50 per cent. That is, Canada and Mexico are becoming larger competitors with each other in the U.S. market.

Chart 18
Canadian and Mexican exports of goods and services within North America, 1990



Sources: Statistics Canada, *Canada's Balance of International Payments*, cat. 67-001; U.S. Department of Commerce, *Survey of Current Business*, (June 1991).

Chart 19
Similarity index for exports to the United States, 1985 to 1990



Source: Department of Finance (1992).

The index also shows the similarity of exports of merchandise goods from Canada and the rest of the world (ROW), and from Mexico and the rest of the world to the U.S. The rise in similarity between Mexican and ROW exports to the U.S. over the 1985-1990 period – about 12 percentage points – is similar to that between Canadian and Mexican exports to the U.S. In contrast, there is little change in similarity between Canadian and ROW exports to the U.S. over the same period. Thus, we see further evidence of the increasing competition that Canada will face in the U.S. market with Mexico.

Relative Canadian-Mexican competitiveness

It is popular to use estimates of labour compensation to compare competitiveness across countries. Such a comparison can easily be misleading when it is made between quite different economies like Mexico and Canada, because important factors other than wages affect the cost of production. Analyses stack the deck against the competitiveness of developed countries if they ignore these other factors that have brought such countries their high levels of wages and standards of living.

Measurement of competitiveness therefore requires an indicator to compare overall unit costs of production, taking into consideration all elements of costs and not just labour costs. Unit costs of production here are defined as total measurable costs divided by production. The other elements of production cost are:

- **Labour productivity** Typically a higher wage goes hand-in-hand with higher productivity and this can compensate wage costs.
- **Cost of capital** Capital is another important factor of production, with lower capital costs being a major advantage in competitiveness.
- **Capital productivity** Similar to labour productivity, the productivity of capital needs to be balanced against its cost to get a true picture of the cost of capital per unit of production.
- **Other factors** Some non-quantifiable factors affecting relative costs include the state of technology, availability of infrastructure, and overall economic and policy environment.

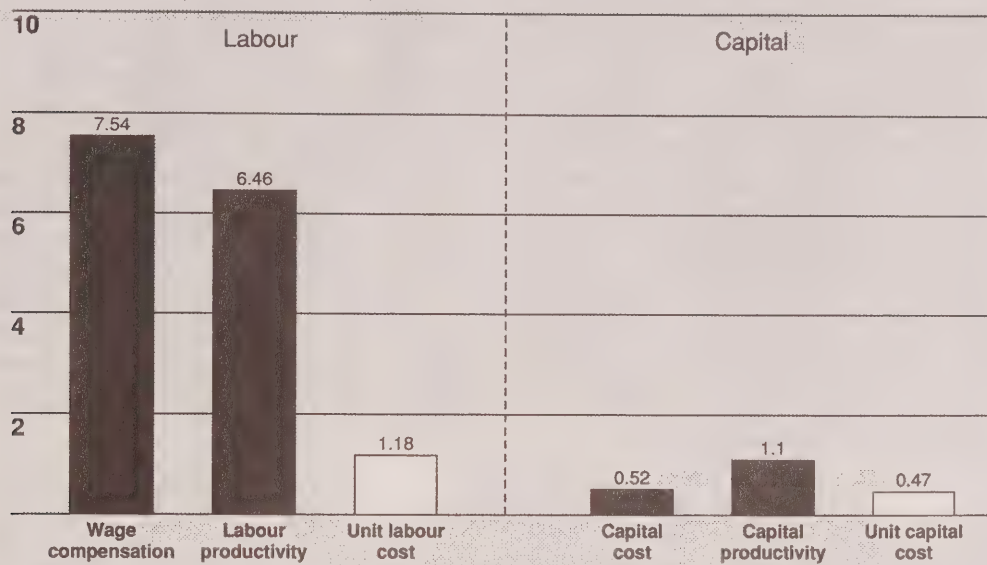
Chart 20 compares the quantifiable components of costs of production in Mexico and Canada: labour cost, labour productivity, capital cost, and capital productivity. (Annex 3 discusses the methodology used to calculate these estimates).

- Canadian hourly wage compensation was 7.5 times higher than Mexico's in 1989, using 1989 exchange rates. An average Canadian worker in manufacturing earned \$17.43 an hour compared with his Mexican counterpart at \$2.31.
- Canadian labour productivity offsets most of the Canadian wage differential. In 1989, a Canadian worker's productivity was 6.5 times higher than a Mexican worker's. Canadian unit labour costs – wage compensation adjusted for productivity – were thus above Mexican costs by 18 per cent.
- Canada's cost of capital is estimated to be 50 per cent of Mexico's. In addition, in 1989, Canadian capital productivity was higher than Mexican by 10 per cent. Combining the two, Canada's cost of capital per unit of output was only 47 per cent of Mexico's.

Chart 20

Competitiveness of Canadian and Mexican economies: Ratio of Canadian/Mexican components, 1989

Canada/Mexico ratio, Mexico = 1.0



- Notes:** a. Wage compensation corresponds to the average hourly wage rate, adjusted for additional compensation such as employer contributions to various legally required, contractual or private benefit plans.
 b. Labour productivity corresponds to the ratio of GDP to total hours worked in the economy.
 c. Unit labour cost is defined as the ratio of wage compensation to labour productivity.
 d. Capital cost is the average interest rate paid on three-month prime corporate paper over the period 1989 to the second quarter of 1991, less the average percentage change in the national CPI price index over the same period.
 e. Capital productivity is the ratio of GDP to the stock of capital in the economy.
 f. Unit capital cost is defined as the ratio of capital cost to capital productivity.

Source: Annex 3.

All of this is convincing evidence that Canada can compete with Mexico. Notwithstanding Canada's higher wage compensation – which is the ultimate indicator of a nation's economic strength – it enjoys higher labour and capital productivity and a lower cost of capital; these are all factors that support Canada's higher wages. True, these data imply that where Mexican production is intensive in the use of unskilled labour, it would have a comparative advantage, since wage costs in such a case are critical. But Canada is a capital-intensive country with more high-skilled labour and also has a comparative advantage in exactly these areas.

Expected developments in Trade and Capital Account balances between Mexico and Canada

The discussion so far has made clear that Canada has a comparative advantage in the products that it specializes in. Next comes the question: Is the Mexican economy likely to become more competitive over time and put current Canadian competitiveness at risk, resulting in increased Canadian reliance on imports from Mexico and lower Canadian exports to Mexico? This is not likely for two reasons.

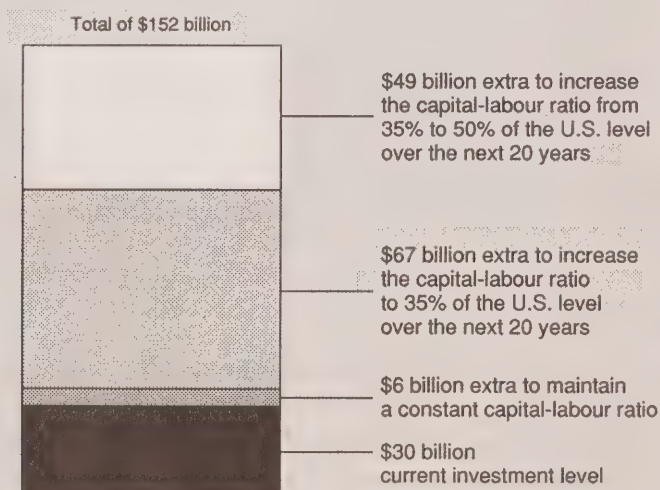
First, on the basis of tariff data presented in Chapter 3, Mexico's tariffs should fall substantially more than Canada's as a result of NAFTA. This will provide greater opportunities for Canada to increase its exports to Mexico rather than the reverse. Second, Mexican demand for capital goods is likely to increase significantly as a result of NAFTA, as shown in the following analysis. The example of Portugal and Spain's joining the European Community, discussed later in this chapter, also demonstrates that Canadian competitiveness with Mexico is likely to increase under NAFTA.

Investment requirements to bring the Mexican economy to North American standards will be huge, owing to the present low level of capitalization in Mexico: its ratio of capital to labour is only one-fifth of the Canadian and U.S. levels. This implies that Mexico will have to import large amounts of capital goods from both the U.S. and Canada. This would lead to potentially large current account deficits for Mexico and corresponding surpluses for Canada and the U.S. In addition, since Mexico now has higher tariffs than Canada, the elimination of these tariffs under NAFTA will increase Canada's competitive edge. Thus, contrary to the concerns of many critics of NAFTA, the increase in exports will outpace the increase in Canada's imports from Mexico. Canada would participate in the development of Mexico by exporting capital goods, technology and know-how that Mexico needs to upgrade its production facilities, and thus benefit further from an increasing Mexican living standard.

The simple accounting of investment requirements for Mexico given in Chart 21 is revealing. Constant annual gross investment in Mexico of U.S. \$103 billion, an increase of 243 per cent from present levels, would be required to reach only 35 per cent of the U.S. and Canadian capital/labour ratios over the next 20 years, which would represent a doubling of the current Mexican capital/labour ratio. Constant annual gross investment of

Chart 21
Projected Mexican investment requirements

billions of U.S. dollars per year



Source: Department of Finance (1992).

U.S. \$152 billion, or more than 63 per cent of the current level of Mexican GDP, would be required to achieve a capital/labour ratio equal to 50 per cent of the U.S. and Canadian ratios over 20 years. Even a fraction of these capital goods requirements in Mexico, exported by Canada, would not only improve Canada's current account balance but also give a significant boost to Canada's economy.

- Mexico's high rate of labour-force growth partly explains these estimates of investment requirements. It would have to increase its investment by 21 per cent a year (from U.S. \$30 billion to U.S. \$36.2 billion a year) just to maintain the present capital/labour ratio over the next five years. By contrast, annual investment in the Canadian economy during the boom years of 1985 to 1989 grew by an average 8.9 per cent.
- Even if Mexico's domestic savings were to double immediately and be maintained at this new level (a strong assumption), a gap of U.S. \$58.5 billion a year would remain to be met by foreign capital purchases to attain 35 per cent of the U.S. capital/labour ratio over 20 years. The impact on the capital and current account of Mexico's balance of payments would be enormous. To put this demand for capital in perspective, in 1990 the Mexican capital account registered a surplus of U.S. \$10 billion, and the current account an almost equivalent deficit.

QUANTITATIVE ESTIMATES OF THE LONG-RUN IMPACTS OF NAFTA

The most elaborate analytic tool used by analysts for quantifying the impacts of a structural innovation like the liberalization of trade in goods, services and capital among countries, is a computable general-equilibrium (CGE) model. CGE models take into account the interactions resulting from trade across countries; within each country, they reckon the results of complex interactions of a large number of commodities and commodity prices as well as a multitude of economic agents. CGE models are designed to determine the efficiency of changes in structural policies. Hence, they can be used to examine the longer-term impact of relative price changes on resource allocation (factors of production, industry outputs, consumer demands and trade) and overall real income.

Academics in Canada and the United States have recently undertaken multisectoral CGE studies of the economic impacts of NAFTA on Canada, analyzing the effect of eliminating tariffs between Canada and Mexico. Cox and Harris used a single-country CGE model of Canada with 19 industrial sectors to evaluate the impact of removing tariff barriers to trade among the three North American economies.¹³ Brown, Deardorff and Stern developed a five-regions CGE model comprising Canada, the U.S., Mexico, a group of 31 other major trading countries, and the rest of the world with 29 industrial sectors, to evaluate the impact of removing tariff barriers between the three countries as well as non-tariff barriers on U.S. imports of agriculture, food, textiles and apparel from Mexico.¹⁴ Brown, Deardorff and Stern also used their model to investigate the impact of removing investment restrictions in Mexico. Table 6 presents the results of these two studies.

¹³ David Cox and Richard Harris, "North American Free Trade and Its Implications for Canada: Results from a CGE Model of North American Trade", paper presented at the conference, North American Free Trade: Economic and Political Implications, June 27-28, 1991, Washington, D.C.

¹⁴ Dursilla Brown, Alan Deardorff and Robert Stern, "A North American Free Trade Agreement: Analytical Issues and a Computational Assessment", paper presented at the Policy Forum on the North American Free Trade Area organized by the John Deutsch Institute for the Study of Economic Policy, Kingston, October 1991.

Table 6
Long-term welfare improvements from NAFTA

	Canada	U.S.	Mexico
	(percentage)		
Percentage change in real income			
a) Trade liberalization only:			
Brown-Deardorff-Stern study ¹	0.03	0.07	1.6
Cox-Harris study	0.03	—	—
b) Trade and investment liberalization:			
Brown-Deardorff-Stern study	0.06	0.2	5.0

¹ Change as a percentage of GDP.

The study by Brown, Deardorff and Stern estimates the general-equilibrium benefits of trade liberalization in North America to represent an increase of \$5.7 billion in the aggregate real income of the three countries. While NAFTA would be beneficial for all three countries, the proportionate gains in relation to domestic GDP would be larger for Mexico than for either Canada or the U.S. – as would be suggested by economic theory. Freer trade typically benefits smaller less rich economies the most, especially if the smaller country is not using its existing resources efficiently. According to the Brown-Deardorff-Stern study, trade liberalization in North America would produce a gain in real income of close to 2 per cent for Mexico, and less for Canada and the U.S. Mexico's higher gain reflects improved access to the U.S. market. Since NAFTA essentially extends the FTA to include Mexico, the initial, measurable gains to Canada are more modest because two-way trade between Canada and Mexico is still relatively small and the two countries have low trade barriers between them. Cox and Harris arrive at similar results for the impact of NAFTA on the real income of Canadians.

The Cox-Harris study shows that Canadian exports to the U.S. would not be harmed due to improved tariff-free access for Mexico to that market. Increased market shares for certain Mexican industries within the U.S. occur at the expense of non-North American suppliers. The Brown-Deardorff-Stern study is categorical on sectoral effects in reporting results:

There is not a single product category in which U.S. imports from Mexico are displacing Canadian exports. Rather the opposite appears to be the case. Canadian exports to the United States of petroleum products, rubber products, non-metallic mineral products, iron and steel, non-electrical machinery, transport equipment, and mining and quarrying all rise while Mexican exports in these product categories fall. Gains by Mexican exporters to the United States appear to be primarily concentrated in agriculture, the semi-manufactured sectors, and some heavy industry. However, Canadian firms also expand exports to the United States in these product categories.¹⁵

¹⁵ Dursilla Brown, Alan Deardorff and Robert Stern, op. cit., p. 12.

The two CGE models reviewed here are static in the sense that they do not provide for changes in the aggregate supply of the factors of production, for improved production technology and market structure, and for the nature and speed of transition of the economy following a structural economic shift. Brown, Deardorff and Stern also performed simulations that give an idea of the possible size of some "dynamic" gains that a NAFTA could produce – these gains result from changes in the stock of capital. They estimated that an increase of 10 per cent in the Mexican stock of capital would triple the benefits from NAFTA to Mexico, increasing Mexico's real income by 5 per cent. Canada and the U.S. would benefit from this Mexican wealth effect, since a wealthier Mexican economy would increase its demand for imported Canadian and U.S. products. In fact, the impacts of NAFTA on Canada and the U.S. under this scenario of investment liberalization are estimated to be double the level under trade liberalization alone.¹⁶

In another simulation, Cox and Harris tried to determine longer-term potential effects of increased price competition within the Canadian market due to NAFTA. They adopted the view that, although Mexican trade with Canada is small, dynamic benefits to Mexico from a NAFTA might result in that country eventually becoming a source of important competition to Canadian firms. Under the assumption that Canadian firms would rationalize their operations to match the price of their lowest-price competitors, the authors show projected NAFTA gains of 2.4 per cent in productivity, 1.3 per cent in real wages, and 1 per cent in national income for Canada.

THE CASE OF SPAIN, PORTUGAL AND THE EUROPEAN COMMUNITY

Chapter 2 argued that trade liberalization brings gains even when it is between partners with significantly different living standards and wages. This is because it allows less developed countries to take advantage of the richer markets of developed countries, while the developed countries gain from increased market access, for the products of their advanced industrial process to the less developed countries and can take advantage of importing low-cost production inputs and consumer products from them. The adherence of Portugal and Spain to the European Community (EC) offers a concrete example of such a partnership to test these theories in practice.

Portugal and Spain joined the EC on January 1, 1986. Together, the two countries account for 15 per cent of the EC population, an even smaller percentage than Mexico's 23 per cent in NAFTA. Portugal's GDP per capita in 1990 was only one-third of the EC average, while Spain's was two-thirds. Labour compensation in Portugal in 1990 was one-quarter, in Spain two-thirds, of the EC average. In the five years before joining the EC, economic growth in Portugal and Spain lagged behind growth in the EC.

These economic dimensions of Portugal and Spain relative to the EC are similar to those of Mexico relative to the U.S. and Canada. A comparison of the post-1986 experience of Portugal and Spain relative to EC with the pre-1986 period (Table 7) can therefore help toward understanding the potential economic implications of NAFTA for Mexico, Canada and the U.S. The comparison shows that:

¹⁶ Empirical analysis generally shows that these dynamic effects can be much larger than the static effects: for example, the Commission of the European Community estimates in *European Economy* (October 1990) that the dynamic gains from the European internal markets would be substantially larger than the static gains.

Table 7

**Economic performance of Portugal, Spain and the EC
1982-86 and 1986-90**

	Portugal	Spain	EC total
	(average annual per cent change)		
Per capita GDP			
1982-86	0.5	1.8	2.0
1986-90	4.3	4.6	2.8
Gross fixed capital information			
1982-86	-4.8	1.3	2.0
1986-90	10.3	12.1	6.2
Imports			
1982-86	1.6	4.6	4.2
1986-90	13.7	14.8	7.6

Source: OECD, *OECD National Accounts 1960-90*, 1992.

- Average annual growth of per capita GDP accelerated in both the EC and Portugal and Spain after they joined.
- Gross fixed capital formation strengthened on both sides.
- After joining the EC, Portugal and Spain's import demand rose dramatically – helping EC exports. The import demand of EC rose more moderately.

This last point supports the argument made earlier in the chapter that Mexican participation in NAFTA, rather than displacing Canadian exports, will likely lead to a strong increase in Mexican demand for Canadian goods. In the process, the Mexican trade balance would deteriorate and that of Canada improve. Increases in Canadian exports to Mexico would lead to higher Canadian incomes and more Canadian jobs.

CHAPTER 5: ADJUSTING TO NORTH AMERICAN FREE TRADE

Any trade liberalization raises the key questions of how quickly and smoothly the Canadian economy will adjust to it and what policies and programs will be needed to ease the adjustment. These questions have to be answered in the context of the preceding chapters, which show that the initial impacts of NAFTA on Canada are likely to be modest.

At issue in NAFTA is the size of the adjustment required, and the economy's capacity to make the transition without incurring significant costs. This capacity can be gauged by examining the economy's normal flexibility in accommodating typical economic change and the associated adjustment. The analysis of this chapter indicates that the degree of adjustment NAFTA could cause will be extremely small relative to the normal pace of economic change. The dynamism of the Canadian process of reallocating resources suggests the economy is quite adaptable by international measures and will absorb NAFTA changes without difficulty. To the extent that such adjustment is not automatically taken care of by the economies, the chapter also notes that a comprehensive range of federal programs is already in place to ease adjustment and to deal with any transitional difficulties caused by NAFTA.

THE FLEXIBILITY AND ADAPTABILITY OF THE CANADIAN ECONOMY

In the face of changing economic conditions, the adaptability and flexibility of an economy will, to a large extent, depend on the adaptability of its work force and its firms. Labour mobility and labour turnover are important measures of work force adaptability, while the entry and exit of firms and the rate at which jobs are being created are indicators of business flexibility.

Labour flexibility

To be capable of effectively responding to structural change, an economy requires an adaptable labour force. Workers must have the skills required to move relatively easily across industries and occupations as firm needs and consumer demands change. Statistics Canada's 1986 Labour Market Activity Survey reveals a reasonably high degree of work mobility, indicating that Canadian workers are capable of flexibly adapting to substantial shifts in the composition of labour market demand.

- About 2.3 million workers, or more than one worker in six, changed employers at least once in 1986. Almost two-thirds of these workers also changed industries, while about 60 per cent changed occupations. More than one-half of all changes occurred without any unemployment. Altogether, private-sector industries exchanged about one-eighth of their employees during 1986.

According to another study, the degree of labour turnover provides further insight into the dynamic character of the Canadian labour market.¹⁷

¹⁷ Georges Lemaître, Garnett Picot and Scott Murray, "Workers on the Move: An Overview of Labour Turnover", *Statistics Canada Perspectives*, Summer 1992.

- During 1988, 4.6 million workers either left their jobs or were permanently laid off, and an additional 1.8 million temporarily separated from their jobs, for total separations of 6.4 million. These figures represent an average of 5 per cent of employed persons separating from their jobs each month.
- There were 5 million hirings in 1988, in addition to the 1.8 million persons returning to work after temporary separation. These large movements are evidence of the tremendous degree of labour market turnover that is typical of Canada. The 5 million hirings accounted for 32 per cent of all paid jobs during the year, and involved 3.8 million persons, 44 per cent of whom already had jobs before being hired.

Firm flexibility

The dynamic process of Canadian structural adjustment has been reasonably rapid in the firms and establishments of Canada. Baldwin and Gorecki¹⁸ found that for the manufacturing sector:

- From 1970 to 1983, the average annual rate of entry and exit was above 6 per cent, involving more than one thousand firms every year.
- Of all jobs in 1971, 31 per cent had disappeared by 1981 as a result of establishment exits or shrinkage, while establishment entry or expansion augmented the job stock by 40 per cent of the 1971 base. Net job creation thus amounted to more than 158,000.

Ongoing structural shifts

The Canadian economy has always demonstrated a considerable ability to adjust to ongoing structural changes. The evolution from small, family-run farms to highly mechanized agricultural holdings provides a good example. From 1941 to 1986, the number of persons living on farms in Canada went from 27 per cent of the population to less than 4 per cent. The massive shift from a rural to an urban population was accompanied by a significant increase in standards of living as per capita real GDP in Canada increased by more than 170 per cent.

More recently, Canada has experienced other significant sectoral shifts in employment. For example, between 1981 and 1989, employment declined by 38 per cent in the machinery industry and 12 per cent in primary metals while it rose by 33 per cent in both the rubber and plastic and the printing and publishing industries. This reveals the economy's strong capacity to accommodate structural change.

Capital market efficiency

Canadian capital markets are among the least constrained and most efficient in the world. Reduced inflation and corporate tax reform have contributed to capital market efficiency and the flexibility of the economy. A Department of Finance study¹⁹ indicates that Canada has been competitive with the United States in financing new investment over the last fifteen years.

Canada's high levels of worker mobility and turnover of labour, firms and jobs are testimony to the adaptability of its work force and firms. A rapid pace of dynamic adjustment is a normal and ongoing feature of the Canadian economy. The magnitudes of

¹⁸John R. Baldwin and Paul R. Gorecki, "Structural Change and the Adjustment Process, Perspectives on the Adjustment Process", study prepared for Statistics Canada and the Economic Council of Canada, 1990.

¹⁹"The Real Cost of Funds for Business Investment", *Quarterly Economic Review*, March 1991.

ongoing postwar economic adjustments in the Canadian economy dwarf the estimated effects of NAFTA, suggesting that Canada will not face difficulties in absorbing its impacts over time.

FEDERAL PROGRAMS TO SUPPORT ADJUSTMENT

The federal government has a wide variety of programs and policies to assist economic adjustment, and it is continually considering ways to improve design and delivery so as to achieve its objectives more efficiently and effectively. Many of the current programs and policies are focused on adjustment-assistance to individuals who need help in adapting or who may lose their jobs. Others are aimed at particular industrial sectors or general business development. This broad array of programs will provide for adjustment needs arising from implementation of NAFTA.

Labour adjustment programs

The Canada Employment and Immigration Commission (CEIC) administers a series of programs to assist workers to adjust to market changes. They fall roughly into five categories:

- ***Employability improvement*** This program provides client-centred activities aimed at enhancing long-term employability through short-term employment, on-the-job training, and skill upgrading. Counselling, purchasing of training with income support if necessary, and mobility assistance are some of the options of the program.
- ***Community development*** This is built around the Community Futures program. It also incorporates ways of involving aboriginal communities as a special target group. Self-employment assistance is being developed to support UI claimants and social assistance recipients for whom starting their own business may be a viable employment option. Local projects can also combine training and work experience so that participants can improve their skills and improve their chances of obtaining long-term work.
- ***Labour market adjustment*** This is designed to offer assistance to employers for identifying and meeting work place skill adjustment needs including more human resource and employment equity planning, training assistance based on design and delivery rather than wage subsidies, and financial support tailored to locally established priorities. Perhaps the best known component is the Industrial Adjustment Service. It intervenes if requested by employers and employees to advise on ways to tackle restructuring when industries are faced with major positive or negative changes in market opportunity.
- ***Information and special initiatives*** This category covers operation of the Canada Employment Centres (CECs) for local labour market information, referrals and placements.
- ***Unemployment insurance (UI) system*** The UI system is the largest labour adjustment program in Canada. By providing income replacement while beneficiaries look for suitable new employment, UI is intended to permit an efficient search to match workers to available jobs.²⁰

²⁰ The Unemployment Insurance Account is entirely funded by premiums levied on employers and employees; the premium rate is set annually so as to not accumulate deficits or surpluses over time. Regular benefits for persons losing their jobs replace 60 per cent of previous income from employment up to the maximum insurable earnings of \$710 a week. Beneficiaries of UI can qualify for between 17 and 50 weeks of benefits depending on the number of weeks worked before going on claim, and on regional unemployment rates; longer employment and higher regional rates lead to longer benefit periods.

In 1990, the government amended the *Unemployment Insurance Act* to place greater emphasis on active adjustment measures under Developmental Uses of UI – particularly training. UI beneficiaries can continue to receive income support while taking approved training courses to improve their chances of finding new employment through matching skills with demand in the labour market. If required, the benefit period can be extended to up to three years while the beneficiary completes a training program. Course costs and supplementary allowances may also be covered. Other Developmental Uses are work-sharing – that permits workers and employers to apportion work during times of temporary cyclical downturn so that income comprises partly wages and partly UI – and job creation – that allows development of short-term community projects to maintain and enhance skills of otherwise idle workers.

In another area of adjustment concern, Labour Canada administers the Program for Older Worker Adjustment (POWA). It purchases annuities in designated cases if older workers (aged 55-64) constitute a sizable proportion of those laid off in a significant shut-down and their realistic prospects for re-employment are slight. POWA provides modest income replacement (70 per cent of UI benefits) once UI is exhausted until the traditional pension-taking age of 65. The program is funded jointly with participating provinces on a 70-30 basis.

Industrial adjustment programs

For Canadian firms seeking new markets at home or in other countries, the government has established an array of programs to provide basic information and resources to penetrate new markets effectively. Programs exist to identify foreign markets that Canadian firms can serve. For example, the Trade Commissioner Service provided by the Department of External Affairs helps Canadian business representatives enter foreign markets. This activity is reinforced by the Program for Export Market Development (PEMD) that helps defray the costs incurred by Canadian companies in developing foreign markets, and by business export orientation programs provided by Industry, Science and Technology Canada (ISTC). Win Exports, a computer-based inventory of the names and products of potential Canadian suppliers, is made available to U.S., Mexican and other foreign buyers.

One way Canadian firms can extract maximum benefit from NAFTA is to be at the leading edge of technology. The federal government attaches high priority to its science and technology policy. The National Advisory Board on Science and Technology advises the Prime Minister on strategic policy choices and directions. As well, a broad range of government programs are available to enhance the competitiveness of Canadian industry through the development, diffusion and use of innovative technologies. These programs include the Industrial Research Assistance Program, the Strategic Technology Program, the Technology Outreach Program and the Microelectronics and Systems Development Program. Each program is designed to meet the special needs of Canadian companies. In addition, Canadian firms can take advantage of various tax incentives, financial assistance for R&D and demonstration projects, scientific and technical information, training activities, and procurement policies.

Firms that wish to know how they stack up against their competitors and what they must do to become and remain competitive also have a government service at their disposal. The Interfirm Comparison Program, managed by ISTC, is a diagnostic service that identifies a participant's strengths and weaknesses and helps them improve performance in areas such as cost control, investment, rationalization, and marketing.

Firms can also benefit from the regional development programs and services of the Atlantic Canada Opportunities Agency, the Federal Economic Development Initiative in Northern Ontario, the Federal Office of Regional Development Quebec, and the Department of Western Economic Diversification. These are important mechanisms that promote economic development and help industry in these regions meet a range of business challenges.

To compete in export and domestic markets, industry must be quick and efficient in assimilating and applying relevant new and advanced technologies, as well as being entrepreneurially aggressive and well managed. Increasingly, industries must seek global marketing strategies and technological alliances to secure their future. The federal government will continue to work to ensure that the scope of government programs enables Canadian workers and businesses to take full advantage of the opportunities opened by NAFTA.

The government's prosperity initiative is at present examining these very issues because of the importance of effective economic adjustment to Canada's future prosperity. This will help assure that the appropriate roles and responsibilities of governments, firms and individuals in the adjustment process are fulfilled.

CHAPTER 6: SUMMING UP THE NAFTA BENEFITS

Canada's reason for joining the NAFTA is simple and straightforward: to maintain and enhance Canadians' living standards. Canada is the second richest country among the large industrial economies of the world, and, according to the United Nations' recently published Human Development Index, Canadians have the best quality of life in the world. But that is today, and the objective is to secure and improve our standard and quality of life 10, 20, 50 years hence.

So what explains this enviable Canadian economic performance in both the material and non-material aspects of life? Any list of answers must include the following four:

- Canada relies on harnessing the strength and energy of markets for its development. This market-based system encourages Canadians to undertake activities in which they excel.
- Canada has always looked worldwide for opportunities owing to its small domestic market. The rest of the world, particularly our neighbour the United States, provides the market that we ourselves do not have to exploit the benefits of large scale production. One in three Canadians now depends upon the international market for his or her livelihood. Imports from the rest of the world – financed through our exports – bring consumers products they otherwise simply could not have.
- The rest of the world has been attracted by our development potential to make huge investments that have raised our standard of living by creating income and jobs. This has had a second round effect of further raising competitiveness and income.
- Canada has used an important part of the gains from the market system and global trade to create a social safety net that assures all Canadians share the benefits of this wealth.

Trade liberalization is a key to Canada's success. One of the major purposes of trade negotiations is to establish a clear set of rules to regulate trade practices among the member countries to an agreement. The clarity and stability of these trading rules are of utmost importance to a country like Canada that trades such a high proportion of its GDP on world markets.

Canada's two-track strategy of multilateral and regional trade negotiations retains our role as a major player in GATT for the liberalization of multilateral trade. At the same time, Canada's regional interests necessitate a set of trading rules in the form of the Canada-U.S. Free Trade Agreement. The NAFTA represents a natural extension of the FTA. In the process of negotiating NAFTA, Canada insisted on safeguarding and improving the gains made in the Canada-U.S. FTA and succeeded in doing so.

This paper has dealt extensively with the crucial question of whether Canada, a rich, high-income country with high-wage citizens, can compete with low-wage Mexico. The answer is yes in three main ways:

- Canada faces increasing competition with Mexico with or without NAFTA, more so since Mexico has embarked on the same process of development that Canada and other countries have used so successfully, a reliance on market forces. Mexican products in the future will give us competition just as Japanese and Korean products

do today. Since more Mexican products already enter Canada duty-free than vice versa, NAFTA provides Canada greater increased access to Mexico than Mexico to Canada. Most importantly, since Canada's main competition with Mexico is and will be in the U.S. market, NAFTA assures that we will be competing on equal footing, subject to the same rules.

- Canada can compete with Mexico better inside the NAFTA than outside. Our analysis shows that although Mexican labour costs are 7.5 times smaller than Canadian costs, Canada's workers have productivity levels 6.5 times higher than Mexico's. The cost of capital is lower in Canada, and capital productivity higher. Canada thus has a competitive edge in the production of high-productivity and capital-intensive goods, while Mexico has a competitive advantage in the production of goods intensive in low-skilled labour. NAFTA will put all member countries on an equal footing, which will be to Canada's advantage.
- Canada should gain further, as Mexico builds its capital stock, given Mexico's huge needs for imports of capital goods, and because Canada has a comparative advantage in this area.

The experience of Portugal and Spain in the European Community supports the case that trade liberalization is beneficial even when it occurs among developed and less developed countries. Following their accession to the EC, not only the two countries, but also the advanced industrialized economy of the EC, achieved higher economic growth, productivity and capital formation. This bears out the lesson of history and common sense: developed countries that got where they are by using the forces of free enterprise and trade liberalization are well able to compete with less developed countries.

In all likelihood, Mexico would have reached an agreement with the United States with or without Canada's participation. This would have resulted in separate two-way trade agreements between the United States and Mexico on the one hand, and the United States and Canada on the other. NAFTA, in addition to ensuring Canada's access to both the U.S. and Mexican markets, maintains Canada's attractiveness as a place to invest. Without Canada's participation, the United States would have been the only country with duty-free access to all North American markets. This would have been a very negative development for Canada's future competitiveness, and attractiveness for foreign direct investment.

ANNEX 1:

THE MAIN ELEMENTS OF THE NORTH AMERICAN FREE TRADE AGREEMENT

The North American Free Trade Agreement (NAFTA) establishes a free trade area consistent with the provisions of the General Agreement on Tariffs and Trade (GATT). NAFTA eliminates barriers to trade in goods and services, removes significant investment barriers, provides protection of intellectual property rights, and establishes rules for the conduct of trade, including the avoidance and settlement of disputes between Canada, the United States and Mexico.

The following is a brief description of the main elements of NAFTA relevant to an economic assessment from a Canadian viewpoint. A more complete description of NAFTA is contained in the trilaterally agreed "North American Free Trade Agreement: An Overview and Description" released on August 12, 1992.

Tariffs

NAFTA will eliminate most tariffs on North American goods over the next ten years. Canada and Mexico will phase out all tariffs on goods over ten years. Mexico will also eliminate import licences. Canada and the U.S. will continue to reduce tariffs according to the schedule agreed in the FTA (or subsequent acceleration agreements).

Rules of origin

Rules of origin will determine which goods receive preferential tariff treatment as North American. Goods wholly originating in North America will automatically qualify. Goods incorporating imports from outside the region will qualify if the imported materials are sufficiently transformed in North America, i.e. undergo a specified change in tariff classification.

In some cases, North American content must also represent a certain proportion of the "transaction value" of a product or its "net cost". The transaction value is based on the price paid or payable for a product. The net cost of a product is the total cost less the cost of royalties, sales promotion, packing and shipping. The required North American content for automobiles, for example, must reach 62.5 per cent of net cost after a transition period of eight years.

Investment

NAFTA will remove significant barriers to investment, ensure non-discriminatory protection of NAFTA investors and their investments and permit investors access to international arbitration to settle investment disputes. With limited exceptions, each country will treat NAFTA investors no less favourably than it treats its own investors (national treatment) or than it treats investors of other countries (most-favoured-nation treatment).

Canada will retain the right to review acquisition of Canadian firms under the Investment Canada review process.

NAFTA will open up considerable opportunities for Canadian investors in Mexico. Mexico will reduce investment restrictions in a wide range of sectors – manufacturing, transportation, mining, agriculture, fishing, etc.

Services

NAFTA extends to cross-border trade in services some of the basic obligations, such as national treatment and most-favoured-nation treatment, which have long applied to trade in goods. This establishes an important new framework for the conduct of cross-border trade in services.

Specifically excluded, however, from this framework are social services provided by governments, basic telecommunications and most maritime and air services. Financial services, government procurement and energy-related services are treated in other parts of NAFTA. Canadian social programs and other social support measures are safeguarded.

Each NAFTA country will have two years to list the state/provincial measures that do not comply with the rules and obligations of the services chapter but which the member country intends to retain.

Financial services

NAFTA will establish a comprehensive principles-based approach to financial services. These principles will include national treatment, MFN treatment, transparency and the "right of establishment". NAFTA also, for the first time, opens the Mexican market to foreign participation. Banks, insurance companies and securities dealers will be permitted to establish wholly owned subsidiaries. Although market share limitations will be applied, these will be effectively removed by the year 2000. After 2000, Canada and the U.S. will enjoy full access to Mexican financial services markets.

Government procurement

The Agreement opens a significant portion of the government procurement market in each NAFTA country on a non-discriminatory basis to suppliers from the other NAFTA countries. For the first time, services – including construction services – as well as goods are covered by trade disciplines.

Panel review of trade remedy actions

NAFTA will make permanent the binational panel review of final anti-dumping (AD) and countervailing duty (CVD) determinations which was established under the FTA. This mechanism provides exporters with the assurance that AD and CVD actions taken against them can be independently and expeditiously reviewed by binational panels. Binational panel review will now be extended to Mexico.

Trade in key sectors

Canada will gain full access to the Mexican market for *automobiles and parts* after a ten-year transition period. Canadian producers of heavy trucks and buses will have immediate access to Mexico. Most trade in automotive goods between Canada and the U.S. is already conducted on a duty-free basis under the Auto Pact and the FTA.

NAFTA sets out separate bilateral undertakings on *agricultural trade*. Agricultural trade between Canada and the U.S. will continue to be governed by the FTA. Canada and Mexico will eliminate all tariff and non-tariff barriers on agricultural trade, with the exception of dairy, poultry, egg and sugar products. Supply-managed sectors in Canada will therefore be unaffected.

The Canada-U.S. *energy* provisions of the FTA, as well as GATT disciplines on quantitative restrictions on imports and exports, are carried forward into NAFTA. Mexico will permit state enterprises, end users and suppliers to negotiate supply contracts for natural gas and basic petrochemicals, providing opportunities for Canadian firms. Similarly, there will be opportunities for Canadian firms providing energy-related equipment and services.

Tariffs on North American *textiles and apparel* will be phased out over ten years. To qualify for preferential treatment as North American, rules of origin will require that textiles and apparel be produced from North American yarn. For cotton and man-made fibre fabrics, goods must be produced from North American fibre. "Tariff rate quotas", providing preferential duty treatment up to specified import levels, will provide expanded access to the U.S. market for Canadian exports of textiles and apparel which do not satisfy the rules of origin.

Dispute settlement procedures

NAFTA establishes institutional arrangements to ensure joint implementation and management of the Agreement and the avoidance and settlement of any disputes between the NAFTA countries regarding its interpretation and application under the oversight of the Cabinet-level Free Trade Commission with the technical and administrative support of a permanent Secretariat. The NAFTA obliges member countries to consult on request. It also provides for the establishment of an arbitral panel in the event a mutually satisfactory resolution is not achieved through the conciliation and mediation provision of the Agreement.

Other measures of interest

NAFTA provides for *accession* to the Agreement by other countries, if NAFTA members agree, according to the terms and conditions that NAFTA members require.

NAFTA provides *comprehensive protection of intellectual property rights*. This covers patents, trade marks, copyrights and trade secrets.

NAFTA affirms the right of each member country to maintain high *environmental standards* and provides that no member should lower health, safety or environmental standards to attract investment.

ANNEX 2: EXPORT SIMILARITY INDEX

The composition and evolution of Canadian and Mexican export flows provide insights into the degree to which Canada and Mexico are becoming more competitive in export markets common to both. The similarity of Canadian and Mexican exports to the U.S. – the main export market for both countries – can be measured quantitatively using the export similarity index (ESI).²¹ The index is given by the following formula:

$$ESI(ab,c) = \left\{ \sum_{i=1}^n \text{Minimum}[X_i(ac), X_i(bc)] \right\} \times 100$$

where:

- a, b = exporting countries
- c = importing country
- i = commodity exported (at the 4-digit SITC level of aggregation)
- $X_i(ac)$ = share of commodity i in total exports of country a to country c
- $X_i(bc)$ = share of commodity i in total exports of country b to country c

The index may range from a low of zero, indicating no overlap in any single commodity (for each $X_i(ac) > 0$, $X_i(bc) = 0$, and vice versa), to one hundred, indicating complete correspondence, item by item ($X_i(ac) = X_i(bc)$ for each i). Table A2.1 provides an example of the index calculation, where countries a and b export only two products to country c.

Table A2.2 provides export similarity indices for the period 1985-1990 for Canada's and Mexico's exports to the U.S., Canada's and the rest of the world's (ROW) exports to the U.S., and Mexico's and the ROW's exports to the U.S. Similarity indices for exports from Mexico and the OECD, and exports from Canada and the OECD are included for 1985-1988. This information allows us to observe and compare changes in the similarity of exports to the U.S. from these regions over time.

²¹ For additional information on the index, see J.M. Finger, and M.E. Kreinin, "A Measure of Export Similarity and its Possible Uses", *The Economic Journal*, December 1979.

Table A2.1

An example of the export similarity index calculation

Product	Exporting countries			
	Country a		Country b	
	Value	$X_i(ac)$	Value	$X_i(bc)$
1	\$20	0.2	\$400	0.4
2	\$80	0.8	\$600	0.6
Total	\$100	1.0	\$1,000	1.0

$ESI(ab,c) = [\min(0.2, 0.4) + \min(0.8, 0.6)] \times 100 = 80$

Table A2.2

Similarity index for export to the U.S., 1985 to 1990

Years	Canada/Mexico	Can/ROW ¹	Mex/ROW	Can/OECD ²	Mex/OECD
1985	29.7	47.9	40.0	50.8	31.0
1988	39.1	46.8	49.5	52.6	42.5
1990	43.4	45.8	52.2	n.a.	n.a.

¹ ROW includes OECD, but excludes Canada and Mexico.

² OECD excludes Canada.

Sources: Statistics Canada, World Trade Database (1985-88); Department of Finance (1991).

ANNEX 3: A COMPARISON OF UNIT COSTS OF PRODUCTION IN CANADA AND MEXICO

This annex describes the methodology used to obtain estimates of unit costs of production for Canada and Mexico. Ideally, in order to make an intercountry comparison of costs of production, one would need to compare the cost of production of a standardized basket of goods across borders. This ideal comparison should be comprehensive, including all factors of production. By its nature, such an exercise would take so much time and effort that it has not been attempted by analysts.²²

A useful alternative is the use of respective countries' National Accounts data on respective income shares of national output accruing to different factors of production in the economy. These income shares in an economy, including all factors of production, must, by definition, add up to one. This information is valuable in showing comparative advantage in producing a variety of goods among countries.

With two identifiable factors of production, labour and capital, the unit cost of production (UCP) is an identity that sums to one:

$$(1) \quad (\text{UCP}) = \frac{wL + rK + pZ}{Q}$$

where:

Q = output (GDP)

w = labour compensation

L = labour (in hours)

r = rental cost of capital

K = capital

p = price of all other factors combined

Z = quantity of all other factors of production

Alternatively, the unit cost of production can be written as:

$$(2) \quad (\text{UCP}) = \frac{w}{Q/L} + \frac{r}{Q/K} + \frac{p}{Q/Z}$$

where:

Q/L = labour productivity

Q/K = capital productivity

Q/Z = productivity of all other factors of production

²² A second best option is to convert one country's *production* valued in its own currency to its partner's currency by using purchasing-power-parity (PPP) exchange rates. These PPP exchange rates are available for some countries based on a comparison of the final goods prices of a basket of consumption goods. This solution is less than ideal in the Canada-Mexico comparison for two reasons: first, it compares consumption, rather than production; second and more important, consistent PPP estimates for Canada and Mexico are not available.

Expression (2) has three components: unit labour cost given by $w/(Q/L)$, unit capital cost given by $r/(Q/K)$, and unit cost of other factors of production, given by $p/(Q/Z)$.

In order to compare Mexican unit costs with Canadian unit costs, Mexican values were converted into Canadian dollars using the 1989 market exchange rate (\$Can 1 = Pesos 2,078).

Data on output were obtained from Statistics Canada cat. 13-001 and from Banco de Mexico, for Canada and Mexico respectively.²³ Labour compensation corresponds to the average hourly wage rate paid in the manufacturing sector as published by the International Labour Office (ILO),²⁴ adjusted for additional compensation such as employer contributions to various legally required, contractual, or private benefit plans. The ratios of additional compensation to hourly earnings were obtained from the U.S. Department of Labor.²⁵ Data on the average number of hours worked weekly in both countries, and Canadian labour force were also obtained from the ILO.²⁶ For Mexico, the 1989 labour force was derived by applying Banco de Mexico's 1989 labour participation rate to the 1989 total population reported by the Centro de Investigacion de Mexico-Wharton Econometric Forecasting Associates (CIEMEX-WEFA).²⁷ For both countries, the rental cost of capital is approximated by using the average interest rate paid on three-month prime corporate paper over the period 1989 to the second quarter of 1991, less the average percentage change in the national consumer price index over the same period. The three-month rate was used as it was the only series available for Mexico over an extended period. These figures are from the Bank of Canada, and from the International Monetary Fund.²⁸ Data on the Canadian capital stock are from Statistics Canada cat. 13-568. Finally, the Mexican capital stock was estimated by the Department of Finance, using investment flows data for the 1960 to 1990 period from the International Monetary Fund and from the CIEMEX-WEFA.²⁹

Table A3.1 reports the results of calculations that compare factor prices, their productivities, and their factor costs per unit of output for the year 1989. As discussed in Chapter 4, this table shows that the Canadian competitive advantage is in skilled labour as well as in goods in which the production process is capital intensive.

²³ Statistics Canada, *National Income and Expenditure Account*, cat. 13-001; Banco de Mexico, *The Mexican Economy – 1991*, p. 183.

²⁴ International Labour Office, *Yearbook of Labour Statistics 1991*, p. 803. The manufacturing sector wage was used as comparable data for total economy wage rate for Mexico was not available.

²⁵ U.S. Department of Labor, *Bureau of Labor Statistics*, 1990.

²⁶ ILO, op. cit., p. 729 (Canada) and p. 730 (Mexico).

²⁷ Banco de Mexico, op. cit., p. 174; Centro de Investigacion de Mexico-Wharton Econometric Forecasting Associates (CIEMEX-WEFA), *Mexican Economic Outlook*, March 1991, p. 31.

²⁸ *Bank of Canada Review*, p. H11 and F1; International Monetary Fund, *Recent Economic Developments in Mexico*, 1991, p. 139.

²⁹ International Monetary Fund, *International Financial Statistics 1991*, p. 532; CIEMEX-WEFA, op. cit., p. 102.

Table A3.1
Unit costs of production¹: Canada relative to Mexico, 1989

	Canada	Mexico	Canada/Mexico
a) Labour compensation ²	17.43	2.31	7.54
b) Labour productivity ³	23.98	3.71	6.46
c) Unit labour costs (c = a÷b)	0.73	0.62	1.18
d) Cost of capital (%) ⁴	6.96	13.41	0.52
e) Capital productivity ⁵	0.76	0.69	1.10
f) Unit capital costs (f = d÷e)	0.09	0.19	0.47
g) Unit labour and capital costs (c+f)	0.82	0.81	1.01
h) Unit cost of all other factors ⁶	0.18	0.19	0.95
i) Overall unit costs (g+h)	1.00	1.00	1.00

¹ On a total economy basis.

² Hourly compensation in Canadian dollars using 1989 exchange rate.

³ GDP per hour worked in Canadian dollars using 1989 exchange rate.

⁴ Real rate of interest (%).

⁵ GDP divided by capital stock.

⁶ Obtained residually using equation: $pZ/Q = 1 - wL/Q - rK/Q$.

Sources: Statistics Canada, cat. 13-001, 13-568; Bank of Canada, *Bank of Canada Review*, January 1992; Banco de Mexico, *The Mexican Economy*, 1991; CIEMEX-WEFA, *Mexican Economic Outlook*, Vol. 23, No.1 March 1991; International Labour Office, *Yearbook of Labour Statistics*, 1991; U.S. Department of Labor, *Bureau of Labor Statistics*, 1991; International Monetary Fund, *International Financial Statistics*, 1991; International Monetary Fund, *Recent Economic Developments in Mexico*, 1991; and Department of Finance (1992).

